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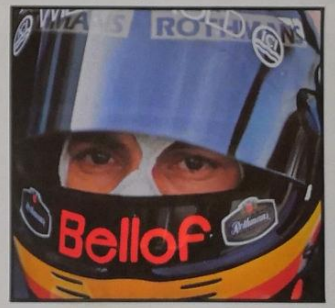

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TOPICS

Hans Stuck has just signed a contract binding him to the Porsche team for the 1985 WEC season. The 34-year old driver, who drove BMWs for eleven years, was chosen following Stefan Bellof's informing Porsche that he would be giving priority to his F1 commitments.

French actor's son, Paul Belmondo, will be driving a David Price Ralt in the Formula 3 championship. His sponsor from last year, New Man, will continue backing him.

Hans Mezger, the Porsche engineer who masterminded the McLaren MP 4 TAG engines, has found himself with a number of awards following a particularly rewarding 1984 season. The AVD prize was bestowed upon him by Paul Fürst von Metternich and the Italian magazine, Autosprint, gave him the Colin Chapman Trophy, whilst the French awarded him their Automobile Magazine Prize.

Bridgestone will be supplying Ralt and March with their rubber for the F3000 championship and Avon have decided to follow suit for teams wishing to put their confidence in them.

The French AGS team are preparing their first F3000 season, as they have had to abandon their plans to race in F1. Their sponsors include Elf and Gitanes, and Philippe Streiff will possibly be driving alongside the Italian Fulvio Ballabio, who was testing at the time of going to press.

Henri Pescarolo was the man to claim the 1984 Porsche Cup, after a tough season against Al Holbert. The Frenchman has won the Le Mans 24 Hours four times, and he raced for the Joest team throughout last year's championship at the wheel of a Porsche 956. He also received a cheque for 80,000 DM.

The Vallelunga circuit has been modified following the aquisition of a further 4.05 acres of land. An extra 1,400 yards of track have been added to the original layout which means that the total circuit length is now 2.6 miles.

AUSTRALIAN GP - MORENO WINS

Roberto Moreno won the 49th Australian F. Pacific GP (1600 cc), which was perhaps raced for the last time. Moreno covered the 100 laps on the Melbourne circuit in 1 hour 11m 20.97s and Keke Rosberg finished in second position ahead of Andrea de Cesaris. All three were driving Ralt RT 4s.

Niki Lauda put in the fastest race lap in 41.27s, but he didn't improve on Moreno's pole position time of 40.45s on the 1600m long track.

ROME - GO-AHEAD FOR '85

The new Roman street circuit is situated to the south of the Italian capital and up to 150,000 spectators can be admitted. A top speed of 256 kph/160 mph is possible on the 3.721 km/2.325 mile track, with an average speed of about 151 kph/94 mph. An estimated 2 billion, 997 million Liras have been poured into the building of the new circuit.

ALAN JONES IS BACK

Australia's Alan Jones is back to F1, and in a big way — he'll be driving for Carl Haas, whose team won the American CART championship, thanks to Mario Andretti in the Lola.
A five-year contract has been signed with "Beatrice Foods" (European off shoots include Samsonite, Avis and STP), for $80 million...
It comes as no surprise that Alan should fall into temptation !

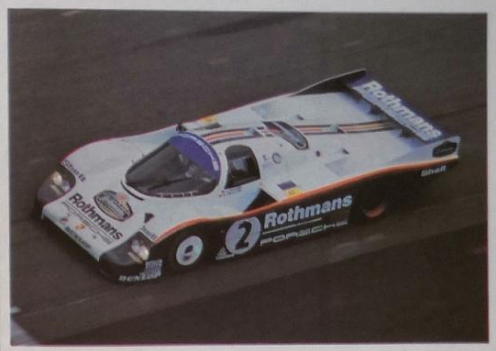
F3000 - TWO OFFICIAL LOLAS

A new official Lola team has just come into being. Jean Mosnier, the ex-Race Tyre Service director has been put in charge, and so partners Bernie Ecclestone. The sponsor remains a mystery, although serious discussions are taking place. Two Lola T950s derived from the 1984 CART winning model, will be driven by two well-proven CART or F1 drivers. The team's headquarters will be at the new premises near the Huddington Lola factory. Throughout the season, five Cosworth DFV-Nicholson-McLaren engines will be operational. Another team has been bought from the factory and will be established in Italy with an Italian driver for obvious commercial reasons.

F1 - WHO GOES WHERE IN 1985

Most of the 1985 F1 teams have already been decided on. Here follows a list of which drivers go where :
Williams : Rosberg, Mansell.
McLaren : Lauda, Prost.
Renault : Tambay, Warwick.
Lotus : de Angelis, Senna.
Alfa Romeo : Cheever, Patrese.
Ligier : Laffite, de Cesaris.
Ferrari : Arnoux, Alboreto.
Minardi : Martini.
Haas : Jones.
RAM : Alliot, Winkelhock.
Brabham : Piquet, T. Fabi ? Bellof ? Dumfries ?
Tyrrell : Brundle, Thackwell ? Bellof ?
ATS : Berger ?
Osella : Ghinzani ? Gartner ?
Spirit : Baldi ?
Arrows : Boutsen, Surer, Bellof ?
Zakspeed : Danner ? Palmer.
Toleman : Johansson, Palmer ?
Moreno ?

PORSCHE CONTINUES



Despite rumours to the contrary, Porsche will be taking part in the 1985 WEC with two 956s, which might well be the latest 962 models, and three cars will be entered for the Le Mans 24 Hours.

NEWS FROM THE STATES

Mario Andretti, the talented 1984 CART champion, has been elected "Driver of the Year" for the third time in his career. Apart from being awarded such a coveted title, Mario was also the best paid driver last season, his earnings are estimated at $943,000.
Dany Sullivan will be changing teams for the 1985 season. The former Doug Shierson Team driver will be joining the Penske-Miller Racing outfit, where he will be racing alongside new team mate Rick Mears, in the CART championship. Mears was the Indy winner and the two men finished 4th equal in the '84 championship.
The "Grand National NASCAR" backers, Reynolds Tobacco (Winston), have announced their plans to continue with their sponsorship for another five seasons.
A million dollars in being offered to the driver who wins three of the four rounds making up the NASCAR "Big Four" championship comprising the Daytona 500, Charlotte 600, Darlington 500 and Talladega 500. The only drivers who have managed to do so to date, are Lee-Roy Yarbrough and David Pearson...
The man who first took the famous Nascar "Triple Crown" in 1969, Lee-Roy Yarbrough, was seriously injured the following year in an accident on the Indianapolis circuit and never recovered from his head injuries. He was put into an asylum after attempting to strangle his mother in 1980. He died in December at the age of 46.

ADELAIDE - OK FOR THE F 1 CIRCUS

Last November, Niki Lauda and Keke Rosberg inspected the new 3.820 km/2.387 mile Adelaide circuit and gave their approval for the 1985 Australian GP to be held there. It may either take place on October 13th, as originally planned, or on November 3rd. The two F1 drivers were both competing in the 49th edition of the F Pacific GP.
The mayor of Adelaide unfroze a budget of 5 million Australian dollars for the construction of the circuit, just outside the town itself.

GLAD TIDINGS

Dallas and (possibly) Monaco have not been included on this year's Formula One World Championship calendar, so two newcomers will play host to the F1 circus in 1985. Rome's application to stage the European round on its new street circuit has been accepted, together with Australia's to host their round at Adelaide, where the track covers part of the Victoria Park Race Course before winding its way through the twists and turns of Wakefield Road and Dequetteville Terrace.
Australians are making a big impact in world events, and a considerable effort is being made in areas like sailing and the America's Cup, Rugby, international tennis and motor racing. Even Alan Jones hasn't been able to resist the temptation and is making 1985 the year of his come-back!
All is not quiet on the British home-front either. FISA has appointed Chris Parson to co-ordinate the World Endurance Championship. "New Wave" driver, Mike Thackwell, has been voted "Best 1984 Formula Two driver", which came as no surprise to those who have been watching his progress.
Behind the scenes of Formule One, a fair amount of shuffling around has been going on too. Ex-Toleman engineer, John Gentry, has joined Renault where Derek Warwick's car will be his main responsibility.
The particularly turbulent 84 — 85 Formula One close-season has brought about a number of forseeable changes and has also witnessed the arrival of Zakspeed to the scene, with ATS announcing their withdrawal. Ferrari are busy preparing a greatly modified 126 C4 whilst the Euralfa has been redesigned for 1985. Uncertainty however, remains the name of the game concerning quite a number of drivers, (for more information, see "Paddocks").
On the rally scene, the World Constructors' Championship has been made a round longer for 1985, as the unpredictability of the Monte Carlo has led the organisers to include the Swedish Rally to this year's calendar. It's just what the protagonists needed to make the final taste of victory that much sweeter. Here's to you, Peugeot, Lancia, Audi and Co!

SPORTS CAR OF THE YEAR - AUDI QUATTRO

The panel of judges at the Hessen Motor Show in Germany had a difficult task in electing the racing car of the year. In the end, the Audi Quattro clinched the title, just ahead of the McLaren MP4 TAG and the Porsche 956.
As a reminder, the Audi Quattro has been crowned world champion twice, and has had 23 outright victories since its launching, in January 1981, into the World Rallying Championship.

BEGUIN TO REPLACE TOIVONEN

As a result of Henri Toivonen's decision to quit the Rothmans-Porsche team this year for Lancia, Bernard Beguin will be replacing him for the international programme. The Frenchman was at the wheel of an M1 for the BMW-France outfit during 1984.
On the calendar : several rounds of the European Championship and three rounds of the WEC (Tour de Corse, the Acropolis and the RAC Rally). He will be driving a similar Group B 911 SCRS, but slightly lighter and more powerful than last year's model.

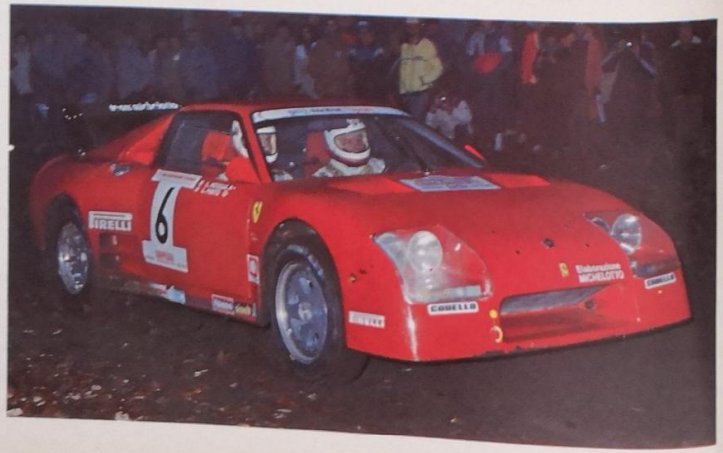
BETTEGA - AT LAST

Attilio Bettega had never managed to score a rally win at the wheel of the Lancia Abarth Rally 037... until the Monza Rally, which took place on December 1st, 1984. He was assisted, as per usual, by Perissinot, and came home a mere 53 seconds ahead of Girogio Pianta — who is none other but the Lancia tester ! They were followed over the line by Waldegaard and "Lele" Pinto, both driving Ferraris.

SWEDEN INCLUDED IN CONSTRUCTORS' CHAMPIONSHIP

The Swedish Rally has been excluded from counting for the constructors' championship since 1980, but in light of the problems between the FISA and the AC Monaco, it seized the occasion to regain its rightful place. The Swedish round will thus be counting for both the drivers' and constructors' rallying championship.

The Rally is planned to cover 1,500 km/937 miles and will include 29 special stages over a total of 480 km/300 miles. The Swedish round is down to take place between February 15th and 17th, from the base town of Karlstad, the traditional hinge-point of the rally, situated in the Varmland region.



MONTE CARLO - THE GREEN LIGHT !

After many high words and heated discussions, the 53rd edition of the Monte Carlo Rally will be taking place as orginally planned.
FISA and FFSA president, Jean-Marie Balestre, went back on his demands when the French Home Secretary used his influence. The AC Monaco have lost no time in starting to organise what can certainly be qualified as the oldest and probably the most prestigious of rallies.
The Monaco GP is still at a standstill however. President, Boeri remains optimistic that between now and the month of May, the situation will have sorted itself out.

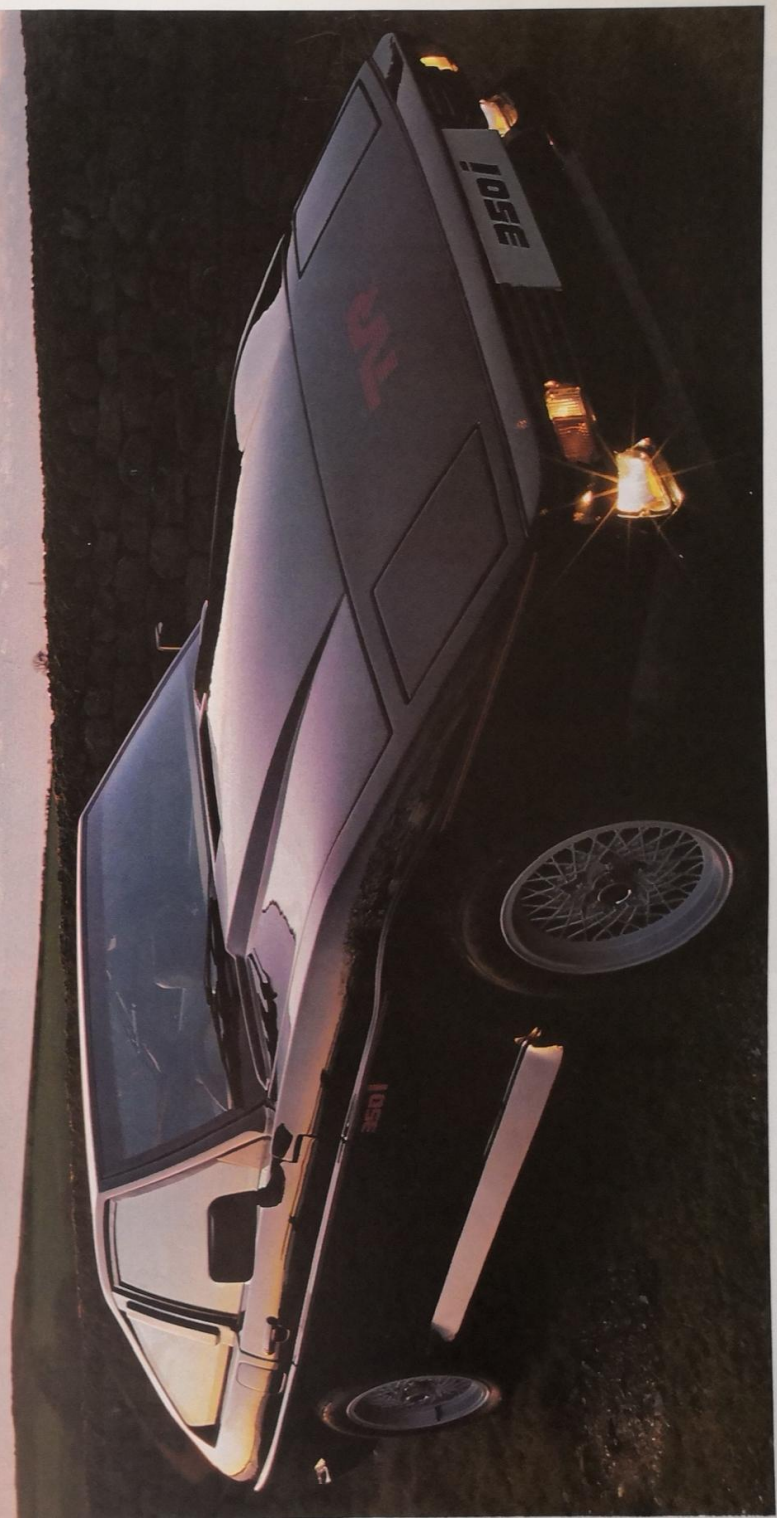
A DRIVE GOING AT VW MOTORSPORT

There is a place available on the VW Motorsport team, now that Kalle Grundel has signed on with Peugeot, Germany. Perhaps Jochi Kleint will thus be able to make this his come-back to competitions, but the 24-year old Swedish up-and-coming driver, Lars-Erik Thorp is also on the waiting list...

FORD RS 200 TESTS

Testing has commenced on the Group B Ford RS 200 designed to compete in the World Rallying Championship. As expected, Malcom Wilson will be driving for the team and his team mate will be the young British hopeful, 24-year old Mark Lovell, who recently finished brilliantly in 12th position at the RAC, driving a Citroën Visa 1000 Pistes.

So scarce it makes Ferraris look like Cortinas.



In an age when cars are turned out by robots in a matter of hours, the new TVR 350i Fixed Head is a glorious exception.

Instead of racing off the production line, it's made at a snail's pace, almost entirely by hand.

The whole painstaking process takes all of four hundred hours, fully half of which time is spent honing the body to a glass like perfection.

But undoubtedly, the real beauty of this car lies more than skin deep.

Beneath its steeply raked bonnet, lurks a torquey, fuel injected 3.5 litre V8 engine, which can send it hurtling past 140 mph.

From a standing start, it can rocket to 60 mph in a breath over six seconds.

Perhaps even more impressive than its raw power, however, is the car's ability to let you use it.

"The steering, handling and road holding" wrote Roger Bell of the 350i Convertible in 'Car' magazine "are in combination superior to those, say of a Porsche 944... It really is as good as that."

Of course, you can't build a car like this by the million and this year, we expect to make a mere thirty.

A degree of rarity which makes the famous Italian look almost commonplace.

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ZAKSPEED PICKS UP THE GAUNTLET

MANY SAY THAT FORMULA ONE HAS BECOME NOTHING MORE THAN AN EXCLUSIVE HUNTING GROUND FOR TOP AUTOMOBILE CONSTRUCTORS. SO, IT COMES AS RATHER A SURPRISE TO LEARN THAT A TEAM LIKE ZAKSPEED SHOULD EVEN CONSIDER JOINING THE PARTY. IT HAS SET ITS SIGHTS HIGH, BUT PERHAPS THERE IS METHOD IN THIS MADNESS...

Torrential rain had been falling on the Paul Ricard circuit since early morning, and to make matters worse, a cold Siberian-like wind was blowing, ironically from the south. The small aerodrome was as silent as the circuit. All that could be heard between the strong gusts of wind was a dull continuous roar of an aeroplane, slowly building into a crescendo, some highflier looking for a shelter from the storm. Then, a fragile twin-engined Cessna came into view, looming from the thick layer of clouds, a German flag was visible on its white tail. The pilot aboard was Erich Zakowski.

He is the happy owner of a brand new F1 team. He wasn't going to be daunted by the weather conditions and divert his flight to near-by Nice. He had come to the Castellet and was going to land, no matter what the weather conditions. The very precise, competent and calculated way Zakowski landed, mirrored his approach to the way he is taking on the F1 challenge he has accepted.

There was no mistaking his Germanic origins as he stepped out of the plane. Or his accent as he came out with the few English cliché expressions he knows. Close to, you can actually feel that he's very much an active sort of person, despite his teddy bear appearance. He looks like he's wealthy enough to enjoy the good things in life without that making him any the less warm-hearted. Until now, he's made a success of nearly everything he has tackled. But, today, he is going further than he's ever been before and into a field where his German background will play a more important role than his qualities. After all, there aren't many German operations which have failed to reach their targets.

Bosch, Porsche, BMW and Mahle, the piston manufacturer, have all made it, not forgetting KKK turbos and many more. Ninety nine per cent of all valve springs fitted to F1 cars are Swabian and the Hart block is also German-made. Neither the Americans, the Japanese nor any other European country seems to have any sort of answer to this technological domination. As the boss and the engine are the only German elements in the ATS set-up (the team is based in Bicester, England and employs British mechanics), Zakspeed will be the first 100 % German team on the F1 circuits in twenty two years. The new comers will be hoping to continue their country's glorious tradition after Auto Union, Mercedes-Benz and Porsche. Furthermore, by building both his own chassis and engines, Zakowski is going a step further than Williams, Lotus or even McLaren, and is basically aiming at teams like Renault and Ferrari

A Zakspeed trailer belonging to Formula Racing is parked outside the pits as the boss walks over to join the mechanics, his hands pushed deep down into his pockets. There's a great deal of noisy guffawing going on, and the lads are busy sweeping out an apparently spotless garage. Neon lights have been put up and a fan heater is blowing. Erich says hello to everyone and gives a forceful account of his antics up in the air. Born on November 25th, 1933, somewhere in Prussia, now Poland, his interest in cars began at a very early age, but he never had visions of being a racing driver. What he enjoys most is the preparation work undertaken by his team at Niederzissen, a small town, with the advantage of being just a stone's throw from Nürburgring. Recently, Zakowski took over the Go-Kart school and track which are part of the new circuit. "*I want to be where the action is*". His three children all enjoy being at their father's side .

Robert is the eldest of Zakowski's children and races a Ford Escort, his younger brother Peter, is now a regular Formula Ford 2000 competitor after learning the tricks of the trade in go-karts. Daughter, Jeanette is not interested in driving herself, but she helps her father out whenever she can. Zakspeed Formula Racing has been set up to look after F1 but there is also Zakspeed USA, Zakspeed Engineering and a number of car and HGV dealerships.

"The States represents a huge potential commercial sector for us because the rules and regulations governing motor sport over there have been established in a more logical manner than in Europe. The competitor can choose to race in the category that fits his car and he's in with a chance. Not only that, the rules aren't changed overnight either in order to keep such and such a constructor happy. As a result there are lots of exciting races and there are always more than enough starters to fill the grids."

In that case, why did Zakspeed bother about Europe if everything was so well-adapted to suit his commercial aims? Two main reasons, the first being that Zakowski had been nurturing a fantasy over the years. The Capri Project had been his last great venture and it had scored victory after victory, making its rivals look ridiculous in the process. Nothing, though, had been seen since 1981. An Endurance programme, the C100, had been envisaged but, unfortunately, this Ford off-spring, half English, half German, never really took off. Zakowski knew that his prototype had no chance against the Porsche armada and decided to let the project fizzle out a slow death in the national championships. From its ashes grew new hope — Formula 1. It seemed that Zakowski had at last found the appropriate moment to make his dreams known and to make them come true. It did seem feasible. After all, he was the giant Ford motor company's privileged and traditional partner and his men were capable of bringing it off. He had the necessary infrastructure too. Unfortunately, when Ford decided to develop a new turbocharged V8 engine, it was Cosworth that got the contract. For someone who was against the producing of turbos, Duckworth didn't do too badly.

For Zakowski, whose turbo 1400cc Capris and Mustang GTPs continued to run like clockwork, it was a bitter disappointment and an episode he prefers not to talk about. *"When I made my F1 plans public, everyone thought that Ford was behind the idea and that they were backing us. They weren't, the project was 100% Zakspeed's. We wanted to feature a 100% Zakowski engine.."* Ford didn't donate a single Pfennig to the German. *"From what I can gather, Ford joined up with Cosworth to create their turbo engine and offered to take on a private team who would run it, as was the case in previous years. I have been on good terms with Ford USA for years and I hope I will be for years to come. We share more or less the same racing calendar for the States, and our European and German programmes are quite similar too. I have gained a great deal of valuable experience out of our collaboration concerning composite materials, supercharging and so on. We have rapidly increased our technical know-how."* Ford didn't bat an eye lid when Zakowski's F1 engine was said to exist.

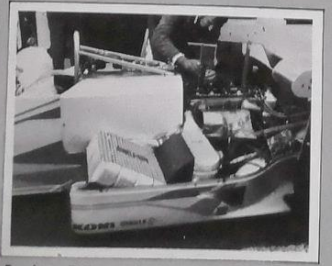
In July 83, Zakowski proudly announced his project to just five people — Vogel, the director, Barth, Bunk, the chassis engineer, Brown and Kreyer. A partition was set up in the workshop and the forty five other employees had no idea whatever of what was going on behind. The engine and its accessories was the first problem that had to be overcome. *"The efficiency of a supercharged engine depends on its thermo dynamics, so we had to concentrate on this area. Brown began his first designs in November, and by December, Barth was making a 1/5 scale model which lost no time in being put through the wind tunnel. We had experts in the matter from the University of Aix la Chapelle come to advise us."*

Over four hundred tests were carried out on the bodywork and on the internal airflow over the radiators and the intercoolers. The design of the winglets and the extractors wasn't checked until much later. A true-to-life size mock-up was constructed at the same time in order to fit the mechanicals. The small team's first encouragement came a few months later with the start of the 84 F1 season. A number of cars had been designed along on similar lines. Were Zakspeed jealous? No, quite the opposite. It proved that they were on the right road.

Zaks opted for modern construction materials to build the shell. Hexcel, the Belgian specialists, who had engineered the first composite Ferrari monocoques, took on the job of testing many baking processes using varying carbon/Kevla/Nomex proportions. They were then crash-tested. *"Although we knew quite a lot about the construction materials we were using, we were rather green about making the shell itself. We couldn't afford to waste time in making mistakes. After this trial period, we built our own shell in a fortnight."* It was 12 mm thick, there were four lateral strengtheners with three 25 mm thick crossmembers. It weighed just 26 kilos. Exactly as according to plan.

Then it was back to the engine. A classical four valves per cylinder, inclined at 22° and double OHC. It was built out of aluminium, compact and light. The engine-shell linking structures took up little engine room. The water and oil pumps were placed outside the engine block and belt driven. *"If one or other pumps breaks down, we don't waste time disassembling the whole engine. It's also allowed us to design a very narrow engine which doesn't hinder the fitting of the turbo system."* Everything has been carefully thought out. The side pods are

TECHNICAL SPECIFICATIONS



Engine : Zakspeed 1500cc, turbo, 4 cylinders in line. Bore and stroke : 90.4 x 58.25.

Engine size : 1495cc, single KKK turbo. Bosch electronic ignition. Kugelfischer injection for the moment.
Gearbox : Five-speed Zakspeed/Hewland. (Plans being developed for a six-speed box).
Chassis : Carbon fibre, kevlar and Nomex monocoque.
Suspension : Rear and front double wishbone with pullrods.
Shock Absorbers : Bilstein.
Dimensions :
Width : 2,120 mm.
Length : 4,450 mm.
Wheelbase : 2,740 mm.
Front Track : 1,800 mm.
Rear Track : 1,600 mm.
Weight : 543 kilos/1,194.6 lbs.

F O R M U L A O N E

Over 400 tests were undertaken through the wind tunnel.

but extremely well designed. On the left-hand side, a first air intercooler, inclined at 30° facing the track, feeds a second upright intercooler. The same set exists on the right-hand side for the engine cooling water. And the oil radiator? It's an aluminium casing through which the refrigerated water is channelled. This ingenious system was first seen on early Williams models. The exhaust and turbo are placed to the left and the inlet to the right. Zakspeed finally decided to feature a home-produced KKK tubo rather than the Garrett equivalent following tests. *"The KKK turbo gives less throttle lag, is reliable, its pressure settings are more stable and the engine is more flexible. At the moment we're using BWM's turbos from last season."*

Behind the engine unit comes Erich's master piece — the clutch housing, spacer and 12-litre oil tank, together with the gearbox case and the rear suspension anchoring ponts. All in one piece. This unique feature was designed and machined at Zakspeed. The suspensions are of the classical double wishbone and pull-rod type. The whole unit has been manufactured out of magnesium, no less. A 5-speed gearbox is fitted but, after the tests at Paul Ricard, a 6-speed box is being considered.

The shell is home-made, in collaboration with Hexcel.

Zakspeed's moulded shell has been designed to cover only the engine compartment and the area above the side pods, like on the ATS, Ferraris and Renaults for example. The overall effect is neat, a perfect example of any top level F1 car today, including the waisted rear portion and the large lower air extractor. The thing that makes it stand out is the fact that there is no bodywork over the engine cover along the extension of the fuel tank. Instead there is a large cut-out which has been designed to limit air turbulence from affecting the rear wing. At the Paul Ricard circuit a more classical engine cover and various shaped extractors had been brought for testing, before the final choice is made.

What of the three fundamental ingredients of any F1 car can be considered as the strong point on the Zakspeed? The engine, the chassis or the transmission? None, because a fourth ingredient has now become even more important — electronics. The Zakspeed has no electronic ignition... *"Yes, that is our weak point. The larger constructors benefit from the experience of their sub-contractors or they have a more sub-*

Zakspeed and 1985

The new team will be joining the F1 circus at the Portuguese GP. By then, two more chassis will have been constructed and the present No 1 model will be kept for test purposes. Development on the 4-cylinder engine will continue in two separate stages. There are seven working blocks. Twelve have been planned for a single racing car (yes, twelve !) and Zakowski has envisaged the possibility of marketing his engines which would justify his Zakspeed involvement with the F1 rules and regulations.

"At present our power blocks develop approximately 800 bhp and hopefully that figure should be up to 950 by the end of 1985. The others will be quoting 1,000 bhp I expect by then... It's utter madness."

What is Zakowski in favour of ? *"No limits on fuel consumption or engine size, the only efficient curb being to check the flow of supercharged air and a regulating valve. This system has proved itself in the American F Indy championship."*

Both Zakspeed and ATS claim that they are the rightful heirs to the traditional German motor sporting history and a spicy comparison will surely result. Will it be a fight out to the finish ? What does Zakowski think of ATS who, as yet, have not revealed their plans for 1985 ?

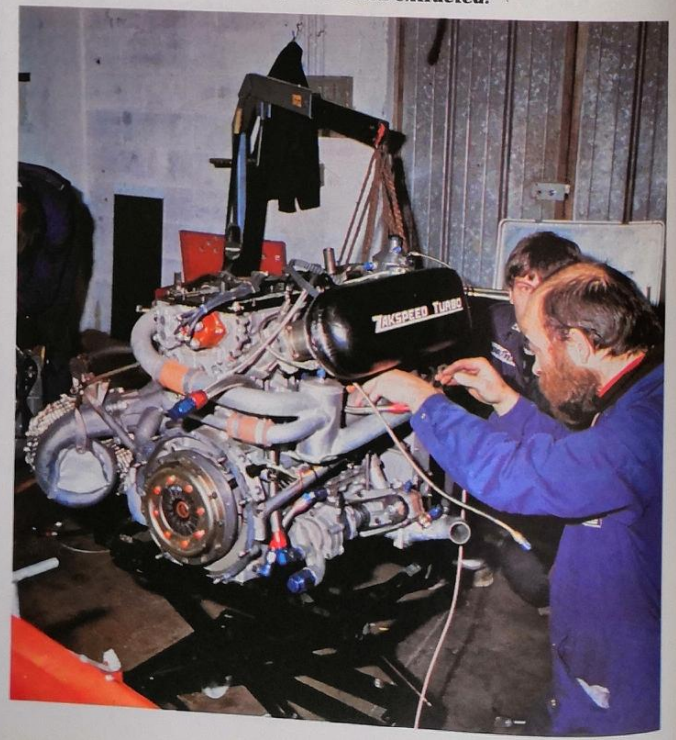
"What should I think ? Well, they've been pretty unlucky recently. They've had to change a lot of staff and lack in stability. The press have given them quite a bit of publicity, whether good or bad is incidental. It's publicity all the same and that helped them quite a bit, the team manager, being the sponsor of his own team. He sold a great many wheels as a result, a clever campaign... and he didn't miss the opportunity of using it to his advantage. But, why hasn't he had the success he deserves ? He's had no real financial problems and his engines have often been good. Anyway, I don't go along with their policy of selfishness and opportunism. I, too, have my failings, but not those."

Zakspeed to date

1968
A new Ford Escort 1100 made its appearance on the circuits, prepared by Zakowski Tuning. After a brief flirt with Group 2, "Zaks" went on to try his luck in Group 5 with Escort 1300s. A few victories were obtained.
1969
Jochen Neerpasch encouraged a closer collaboration with Ford Cologne. More victories, but a number of retirements.
1970
A new name for the group, "Zakspeed". Its Escort 1300s came in fourth overall in the national Touring Car and Hill Climbing championships.
1972
The new BDA-engined Escort 1800 developing 235 bhp began its career, finishing fifth in the Group C championship.
1973
Glemser won Zakspeed their first title and Hans Heyer, in an identical Escort, dominated the European Tourist Car Championship.
1975
A 1-2 placing for Heyer and Ludwig in the National Championship.
1976
The works Ford team broke up and Zakspeed became the official Ford representative in motor racing.
Heyer and Ludwig fought it out between themselves for the 4th national title. The two team mates paired up for the Kyalami 1000 km and finished in second position.
1977
First attempt at Group 5 with the Zakspeed/Mampe. Their closest rival, the BMW-Team Junior, gave them a hard time... Heyer/Scheckter and Hezemans/Hahme/Joest, scored a 1-2 placing at Kyalami.
1978
The Capri Zakspeed featuring a 4-cylinder 1.4 turbo engine appeared on the racing scene. Heyer finished 7th in the championship and Hahme 9th.
1979
The two Capri drivers, Heyer and Ertl had a fratricidal duel throughout the season. The former clinched second place in the championship.
1980
The Super Capri had its first official outing on March 23rd. Title holder, Ludwig, notched up five wins in Division 1, beating the Porsche 935s. 1980 was a year of celebrations for Zakspeed with its 50th victory in the German championship, 20th Capri win etc. The Escort Zakspeed clinched the national titles in Spain, Italy and France.
1981
Ten victories and another title for Ludwig. Winkelhock had six wins.
1982
Zakspeed entered a Ford C100 in Group C. Two wins for Ludwig.
1983
Ludwig concentrates on the American IMSA championship with the Capri. Niedwields came in 3rd in the German championship at the wheel of the Group C and talks of a possible F1 involvement began...
1984
The F1 model was ready. Construction of the carbon shell commenced at the end of May. First tests with full scale car in the wind tunnel began in July. The engine was fitted in September and construction was complete.

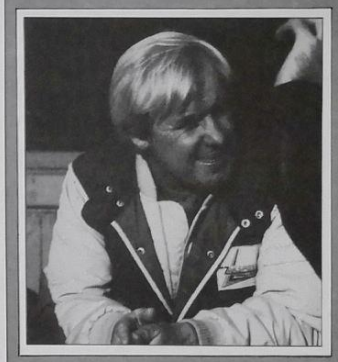
stantial research and development budget than we do. We've got to manage somehow. There's no way that we can develop our own electronic ignition and injection systems. Hopefully, we should be receiving products shortly but, until then, we'll have to make do with our more than modified Kugelfisher system. Obviously we wouldn't race with it but for our present development programme, it performs its duty well enough."
However, Zakspeed do employ a talented electronics engineer who has just created something interesting. It is a digital dashboard with only two instruments. One for engine revs and the other for the turbo pressure. The other information is supplied when the driver turns a knob to get a reading on the water or oil temperatures, oil or water pressures, fuel inlet air temperature etc which light up little "windows". If something goes wrong, a warning light comes on and the driver can quickly flick through the various functions until the offending item lights up. At the time of testing in the South of France, Zakspeed had begun fitting the computer, but McLaren had only had theirs for a few days...
The testing of the new car at the French circuit was its second outing. Winkelhock had been the first to test-drive it, the day after the Portuguese GP when he put in forty laps or so. It was a crucial moment, as Zakspeed didn't know if this was going to be the beginning or the end of their project. With a lap time of 1m 25s on DRS tyres (the fastest race lap at the European GP was 1m 23.15s), Winkelhock advised Zakowski not to drop his project. *"He said the chassis was light and easy to drive, and that the car handled well. I was more than relieved when he said that in comparison with the BMW, my engine should have a promising future."*
At the Provencal circuit, Winkelhock had been replaced by Palmer — although at one point, it looked as though Marc Surer was going to be taken on. About ten laps were covered a day, as the car was held up by a series of minor incidents like the gear lever jamming and the ratios having to be sorted out. Nothing that doesn't usually have to be done with a new car. *"We haven't come here to set a fast time, but to learn a little about what a F1 car is all about. We've got to find the optimum set-up for the turbo and fuel flow. We're a long way from perfection, even the injection cams aren't the right ones and we have to set then by hand. We've got time until we start worrying about putting a good lap time in. We haven't got soft tyres yet and Goodyear haven't supplied us with their latest products either."* Surprisingly, the American manufacturer agreed to supply Zakspeed despite statements confirming their intention not to take on any new teams next season. *"In the States, we got along fine, and they've decided to go along with us, but nothing's been signed yet. Michelin's withdrawal from F1 has caused panic and a number of teams still don't know who's going to be supplying them with their rubber. We'll just have to wait until things settle down a bit."*

Well-proven engines — mounted on the Ford-Capri and the Mustang — from which 800 bhp have been extracted.



Obviously it's very difficult to speculate on how Zakspeed will make out. Will they be competitive from the first GP? Will they quickly become part of the BMW and Porsche Panzer Division? How is a small-time constructor going to rival with the established top teams? One thing's sure, silver-haired Zakowski is not moving into F1 for the fun of it, nor to spend years just trying to tag along, like some. He loves motor racing as much as anyone else, and F1, for him, comes at the top of the motor sport pyramid. But he keeps level-headed and lucid about the whole thing. Sport is no longer the order of the day, more a combination of high technology and financial gambit, where knowledge and competence play important roles. The same qualities that are needed to launch into designing and marketing a computer. In fact, Zakowski's aim isn't to remain a F1 team owner but rather a business man, something which he readily admits. *"I have six people working on the F1. In all, there are approximately fifty people indirectly involved with all our activities. So, we are a small team, but we have the edge over our competitors in that our team came into being naturally, by itself. We see Formula 1 as a challenge and we are proud to be there."* Perhaps he is referring to the Ford Turbo/Cosworth/Hass-Lola deal?
"Formula 1 is nothing more than a commercial affair for Ford, Renault, Honda and Porsche. A top level one, OK, as they make use of the talents of numerous engineers and vast sums of money are being moved around because they've got to think of their image and how they will sell more production cars. I'm not selling anything, unless someone wants to buy the engine, once it's proved itself reliable. Hopefully that should be by 1986. We've got this far through the hard work put in by our skilled team members. Every single little bit of this racing car has been made by them, just like everything else that was within our capabilities. No doors have been knocked upon to help us out. You might think that I'm boasting, but I firmly believe that this is the only way to learn and to understand. Once you've understood and know just how far you can go, there's little to stop you from not succeeding." Zakowski realises that he won't be ahead of Renault, Ferrari or McLaren straight away, but he hopes to be at their level from the word go. Once he's proved himself he will undoubtedly find that the backers will show an interest and, with a little more technical know-how, he will then be in a position to rival with the larger constructors. *"That's how I plan to do it. I appreciate that many years of work and experience are required before you can start dreaming."*
Not many sponsors are flying their colours on the silver arrow... Shell, Goodyear... Is Zakowski waiting till he gets a backed *"name"* driver? *"No, a driver's job is to do just that, drive. Who am I to ask a driver to pay for racing my car? I've got no proof as yet that all this is going to work out, I'm not in a position to go begging right, left and centre. As I said before, the only thing we can do is to go out and prove what we can do. We are working towards that, and we'll see if it falls through or if it's worth pursuing. We've found quite a few German sponsors who would be interested in backing us, but they don't know the first thing about F1. We'll have to put that straight."*
As mentioned earlier, Surer declined the offer he was given, preferring Arrows. So, Zakowski turned to Jonathan Palmer. *"We haven't talked much about '85. Personally I would love to stay on with them. The team is hyper-motivated, competent, well-organised, ambitious and has just the right approach. In spite of what Erich says, they've got the means to go through with it. He's always succeeded in his ventures, so why not in F1 too? I believe that he can do it. I enjoy the challenge of starting out from scratch like this. It's all that much more exciting. The car has only just come out of the development stages, but let me tell you that it has enormous potential concerning the handling. As for the engine, I think I must have put in more miles testing the Zakspeed than with my 84 F1 car..."* Interpret that as you wish.
So, good luck to you Mr Zakowski. You've convinced us of your obvious desire to succeed — even if the decision was motivated by an angry reaction. But you do seem to be going a rather strange way about it and it won't be long before you come to a point where you'll be in more or less direct contact with someone you know well. You follow? Ford and Zakowski both started out on their respective F1 ventures within a couple of days of each other. Ford financed a Cosworth engine, which until today has not been sighted for the simple reason that it doesn't exist. You don't have a sponsor, but we've heard the roar of your four-cylinder engine block. Ford have been discussing plans with Haas and Ecclestone to enter their engine whilst you've been constructing your chassis because they didn't believe in your engine. In a few months you'll be coming up face to face with your traditional partner and key-man — being Michael Kranefuss. You remember? Think back, he was once your number one driver. In 1968 he finished 3rd at the' Ring in *"your"* car and signed *"your"* first victory on August 17th, of that same year in an Escort 1300 GT. Your first champion. Fate sure is strange, isn't it? ■

The men in charge



Erich Zakowski is not a man who believes in numbers, but in competent, dynamic and enthusiastic associates. So, who are they ?
Siegfried Vogel will be 44 on February 6th, 1985. He believes that five-star petrol runs through his veins instead of blood. His professional career began at the German oil company, Aral. He was then asked to join Total. He went to Zakspeed in 1967 to look after the business side and public relations with the sponsors etc., leaving the boss free to devote his attention to the technical and sporting side. He is married with an 18-year old daughter and a son of 16. Vogel relieves himself from the stress and tension of his professional career through sport and classical music.
Helmut Barth is 35 and is the technical director at Zakspeed. He was born at a stone's throw from the Nürburgring. He started out as a mechanic for his present boss. His competence soon had him promoted to chief mechanic. Today, Barth, who has never strayed from "Zaks", is now in charge of the chassis and the aerodynamics. He is married with a son and spends the little leisure time he has playing tennis or driving and upkeeping fast cars for the pleasure.
Paul Brown is the 36-year old engineer from Lancashire in charge of the chassis/suspension unit. The sporting side of F1 leaves him cold but welcomes the technological challenge. He started out in 1972 with Chevron, then worked for March and Maurer. To find out more about new techniques in carbon fibre he left F2. Zakspeed took him on in 1983. His family still lives in England and now that he is charge of the F1 programme, he has no more time for sailing.
Norbert Kreyer, 32, was asked to join Zakspeed in 1982 to develop a four-valve cylinder head. He has three sons, but his heavy involvement with the F1 programme means that he sleeps more often at the workshop than at home. He is assisted by engineer Gianni Morelli who used to work for Ferrari, Alfa and Momo and whose main task is to deal with the various foreign sub-contractors.
Bruno Bunk, age 34, is the second Pole, with Zakspeed himself, on the team. His is known as "Golden Fingers" because of his ability to make almost anything out of a bit of piping and a sheet of aluminium. He has two sons and two main passions in life — racing cars and electronics. What he would like to do most ? Be able to go to races with his hands in his pockets !

FERRARI TESTAROSSA
TOMORROW'S WORLD

I'M SURE THAT NO-ONE WILL CONTRADICT ME WHEN I SAY - MOST SUBJECTIVELY I KNOW - THAT ALL MOTORING JOURNALISTS LOOK FORWARD TO THE DAY THEY MIGHT BE PRIVILEGED ENOUGH TO CROSS THE FERRARI THRESHOLD. SUDDENLY, YOU FIND YOURSELF AMONGST ARTISTS, FIGHTING FOR A CAUSE. DREAM BECOMES REALITY. DRIVING THE TESTAROSSA WAS SOMETHING THAT I THOUGHT WOULD ONLY BE BUT A FANTASY...

I could never understand why my colleagues always wanted to be the first to drive a new car on the market. I'd always thought it preferable to give readers precise and correct information based on a long test-drive rather than the inevitable short-lived impressions which are left after a quick run.

Time hasn't been able to erase the wonderful memories I have of driving 512 Berlinetta Boxers at the Le Mans 24 Hours on a number of occasions, neither has it been able to sever the links that used to bind me to the world of dedicated Ferrari enthusiasts. Racing is the soul and life of Ferrari and the raison d'être of the people who work there — competition is the magical word that brings a smile to their lips and makes them sit up and listen...

RED HEADS

The *"Comandatore"* brought the car along for us to photograph against the setting where it had been brought to life. Imagine my utter amazement when he asked me if I'd like to get in behind the wheel and drive off! For me it was a historical moment, that of being the first journalist to discover what will become (I'm sure) one of the greatest Ferraris, and that of driving it on the private Fiorano testing circuit. Only the day before, I'd been on a guided visit of the Maranello factory with the sound of René Arnoux' 125 C4 testing in the background. I was given a second privilege — that of giving the Ingenere Ferrari my first impressions of the car that he himself had named *Testarossa*. The idea had come to him last spring and he wanted to remind us of the great Ferrari era where the Testarossa chalked up victory after victory.

Ferrari had a special way of differentiating particularly well performing cylinder heads (testa) apart — he would paint them red (rossa), instead of the usual black. Testarossa became the familiar nickname for models such as the 4-cylinder, 2-litre 1956 500 TR engine. Without the shadow of a doubt, the most famous Testarossas were the V12 competition Ferraris whose reign lasted from 1958-1962. During that time, the illustrious Testarossas took the world constructors' crown three times and won the Le Mans 24 Hours four times for the Italian firm. These engines were famous for their double overhead camshaft cylinder heads, based on the famous 3-litre V12. Ferrari claims that he was the first constructor to break through the mystic 100 bhp/litre barrier with a Gran Turismo normally-aspirated engine. For the past twelve years now,

all production Ferrari models feature double overhead camshafts and the Testarossa (now written in one word for aesthetic reasons) is no exception. But it also innovates a new technological evolution — that of featuring 4-valve cylinder heads on the 5-litre Boxer 512 engine base. The enormous potential easily justifies that the camshaft heads also be daubed in red...

THE SHAPE OF THINGS TO COME?

I've seldom fallen for a Ferrari at first glance. The main strong point of the long-standing Ferrari/Pininfarina union is to have produced a shape which, instead of going out of fashion, has rather stayed with the times. I must confess that I was wondering what on earth they were up to when I saw the first sketches of the successor to the BB. When the Testarossa had its world presentation in Paris, I realised, as I gazed upon it for the first time, that a certain nostalgia concerning the 512 Berlinetta Boxer would soon be wiped away. It's impossible to really appreciate its elegant aggressiveness until you get behind the wheel and drive off — it's something that just can't be expressed verbally.

Ferrari admit that they too were more than a little anxious. After all, how were Ferrari purists going to react to these stunning and daring new lines? The BB was still selling well with a 6-month delay for deliveries until production was stopped in June 1984. Then orders came in for the Testarossa from all over the world, quickly putting an end to the factory's and the various importers' worries. Now, it's a question of for how long. Personally, I'm sure that the public will buy the Testarossa for a long time to come. Perhaps the car looks rather sensational according to today's standards but a certain futuristic classicism can be detected. Ferrari have insisted on putting in a tremendous amount of work to emphasise the timelessness of a Gran Turismo selling at 160,080,000 Liras (approx. £70,000). 25 billion Liras have been invested into the project for a turn-over of 200 billion Liras (i.e. 12.5 %, which is considerable considering the size of the outfit). The Italian manufacturer has endeavoured to continue with a policy of offering its customers, even the poorer ones, an entirely satisfactory product in relation to the price they pay.

48 VALVES TO REPLACE THE BB 512i

Work on the project to replace the BB began in the late seventies. Ferrari could have brought out his new creation a year before he did, but he saw no reason to rush things. The decision was taken to fit the 48-valve engine right from the outset. The Testarossa can be considered as an evolution of the 512 BB theme, featuring all the improvements which have resulted from twelve years of experience in top level automotive technology.

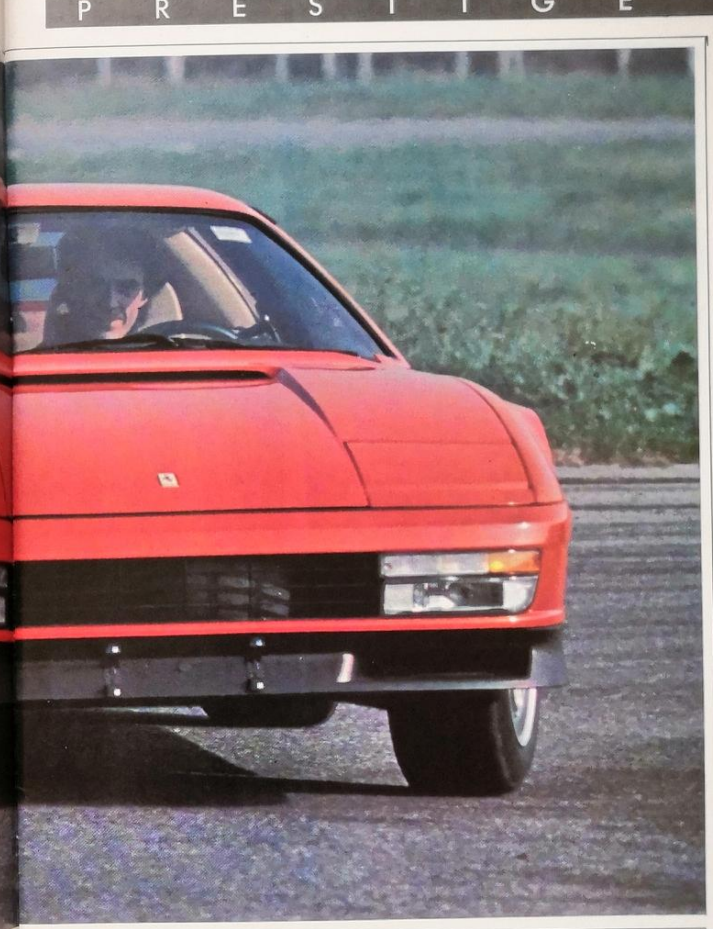
Bellei, the engineer in charge of the research and development department, confirmed that yes, everything was new. Almost all the parts have been redesigned around what appears to be an identical base. This is true of the power block, whose engine size remains unchanged at 4942cc, but it is some 20 kilos lighter than its predecessor despite there being twice as many valves. The dry sump, flat 12-cylinder engine is placed in its usual place above the five-speed manual gearbox — which has little in common with the former one. It has been designed to transfer the much higher power and torque ratios developed by the new engine. The *"48 valve"* Testarossa produces 290 bhp at 6300 rpm as against the 340 bhp at 6000 rpm of the *"24 valve"* engines fitted to the last of the BB 512is. The familiar 12-cylinder engine has the same dimensions as before with a bore and stroke of 82/78 mm. The compression ratio remains identical too. Torque figures have gone up from 46 mKilos at 4200 rpm to an incredible 50 mKilos at 4500 rpm.

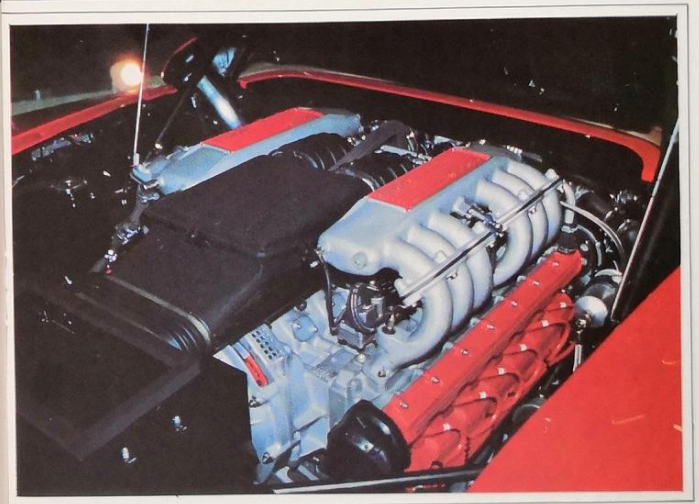
A second peculiarity, apart from the 4-valve-per-cylinder innovation, is the fitting of lateral radiators to the Testarossa, complying with the present tendency found in motor racing competitions. Ferrari has avoided the risks involved when one takes on the role of *"daring innovator"* (for example the Lamborghini Coutach) and has prefered to try and solve the other problems which inevitably crop up when a production car is driven at over 180 mph on the open road or a circuit. The technicians and Pininfarina stylists had to work according to specific parameters to determine the actual outline of the car. It was absolutely vital that each of the wheels' tyre surfaces be in maximum contact with the road, that side winds did not affect the handling, that the engine cooling system, transmission, brakes and other mechanical parts all fulfilled their functions, not forgetting sufficient all-round visibility etc... The front and rear tracks were both increased even more, compared with the BB, and larger tyres were also fitted. This is especially noticeable visually — and it also gives the same disproportionate feel as a F1 racing car. No-one but Pininfarina could have succeeded in designing such clear cut lines along such complex imperatives.

SUPER BB

As soon as you get inside the Testarossa, you instantly realise that it is a hyper-perfect evolution of the BB. There's no mistaking the family air whose pedigree has been improved

Ferrari Testarossa





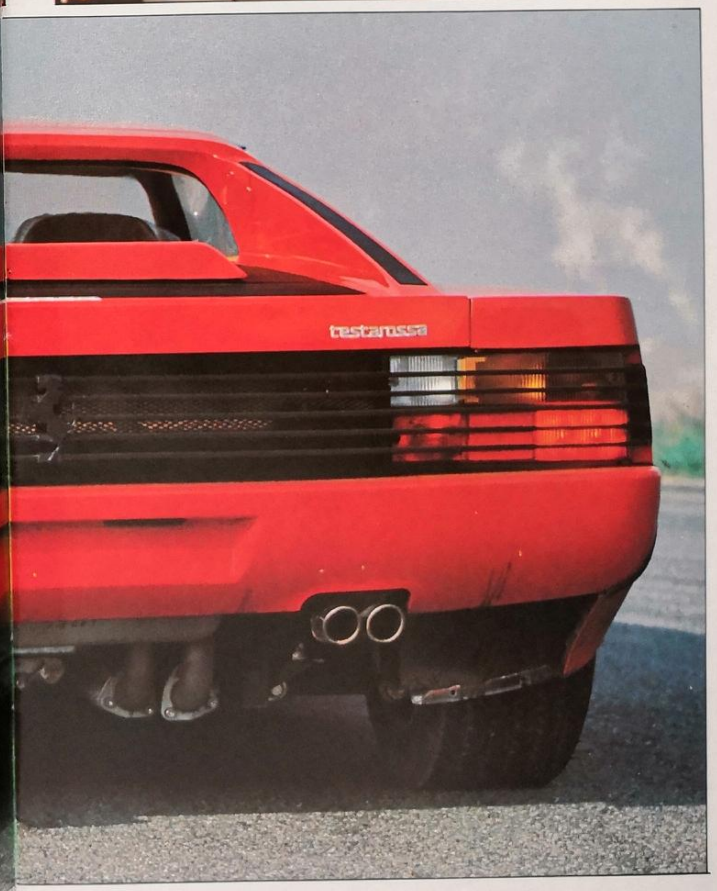
upon most subtly. The character is still very much in keeping and is further enhanced by new sensations, the most surprising of which is the new accurate feedback that comes through the steering wheel. You can actually feel that the front track is completely different, the geometry totally ahead of its time. It's difficult to draw comparisons but, keeping to the Ferrari range, there is even more of a difference than between the front track of a 308 and a Mondial. The Testarossa engineers have tried to reduce on the overall weight of their car. It's still no featherweight, tipping the scales at 1,506 kilos in its unladen state. The chassis/bodywork unit is constructed at Pinifarina's workshops and uses traditional Ferrari technique — a tubular chassis with steel plate reinforcing. The rear portion, as on the Mondial, and later on the GTO, is entirely removable to give easy access to the engine for eventual repairs. The entire unit is constructed in aluminium, apart from the roof and the doors which, for security reasons, are of steel. In conclusion, the easy-to-drive feel of the wheel is the result of improvement on the front track. As soon as you shift into first, the notion of heaviness — all too familiar on the BB — is simply forgotten.

The streamlining has been perfectly designed so that the car's lightness does not become a fault at sustained high-speed driving. The track was dry when I tried the smart red car out at Fiorano, but the speedo needle was pointing to over 135 mph as I roared down the straight. It should be mentioned that Ferrari's performance figures are usually borne out by our test figures and here the Italian constructor has announced a top speed of 290 kph/181 mph and a 0-100 kph acceleration time of 5.8s, the standing 400 m is said to be covered in 13.6s and the standing kilometer in 24.1s (with a terminal speed of 232 kph/145 mph). These figures will only be able to be checked for their accuracy on a track like Nardo, in Southern Italy.

The thing that really astounded me was the way the brakes reacted to such an extraordinarily powerful and relatively heavy car after several laps on the Fiorano circuit. I wasn't driving, but the testers, who know their job inside out, put on a great show, really pushing the car to the limit. The brakes performed their job as well as expected — despite the smell of the linings overheating! This point goes to prove the advantage of having a private circuit to undergo testing for development purposes. Single seaters bearing the sign of the prancing horse are also tested here.

The same can be said of the suspension which is adjusted in such a way as to suit all types of turns and curves. As a result, the Testarossa shows a natural tendency to understeer in tighter bends. But by simply adapting one's driving style, the phenomenon is easily controlled. Although one has to be careful about drawing conclusions form a circuit test, it does appear that the Testarossa is

PRESTIGE TEST



easier to handle than the BB. As the car heels over, you can actually feel the impressive weight of the rather high engine placed centrally, to the rear. This hereditary characteristic has a less alarming feel due to the improved reactions of the widened rear track and the improved grip thanks to the wider dimensioned Michelin TRX tyres.

The fabulous flat 12-cylinder engine is a winner through and through. It has been sculptured out of aluminium and lavished in superb high-technology accessories. If you're not actually behind the wheel, it's difficult to imagine that it's more flexible, more powerful or more highly strung — and yet it is! Drive the Testarossa, and you'll see for yourself. So impressed by the fact that everything is just that little bit better than on the BB, I hardly had time to appreciate the improvements concerning the gearbox. The gear lever remains the traditional Ferrari-type with its visible grid and its muscled character. I've always taken a great delight in this virile type of gearbox, enjoying the mechanical feel each time I change gear. I probably didn't notice the new smoother and more precise, closer-ratio gearbox at once because it felt so natural. But it's just another strong point on the new Ferrari and I was certainly more engrossed with Fiorano and the overall impression to really notice.

CONCLUSION

The day I spent at Ferrari was so intense that I don't think I had time to register all the different impressions I had of the Testarossa, which is why this first contact should be followed by a more thorough test. I wasn't really expecting to drive the Testarossa at all — I'd gone there to do some work on the GTO but that's another story. Let's just thank our lucky stars that there is still a constructor around capable of producing such a daring and powerful Gran Turismo car for the public. Who else but Ferrari could have created such a symbol of speed, racing and free enterprise in its most passionate form?

The most encouraging observation that can be made concerning the arrival of the Testarossa is the current health of the Ferrari phenomenon and enterprise together with Mr. Ferrari's own obvious lucidity, something which Maranello cleverly adapts to fit the requirements of changing times. I would just like to finish by giving you a revealing example of Ferrari's technological strength at a time when ecologists are pushing politicians into enforcing stricter anti-pollution laws. There is a difference of only 2-3 % between the power of the European version of the Testarossa and its American counterpart. The drop for other models is usually situated at about 20 %, once all the anti-pollution equipment has been added. Those in favour of a levelling down will have to wait. Exciting cars are still here, and they are here to stay for a while to come... ■

DATA SHEET

FERRARI TESTAROSSA

GENERAL DATA SHEET

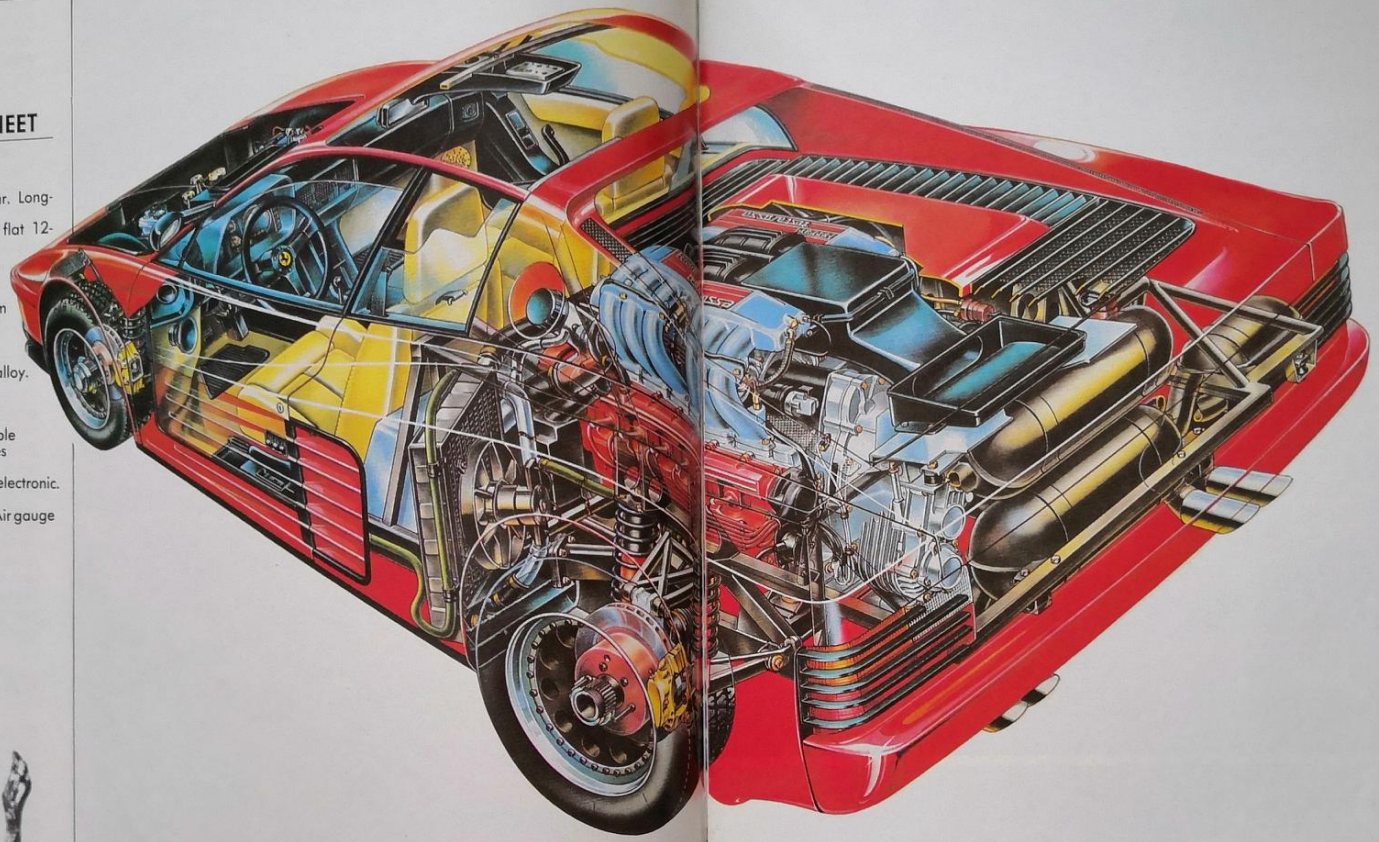
ENGINE

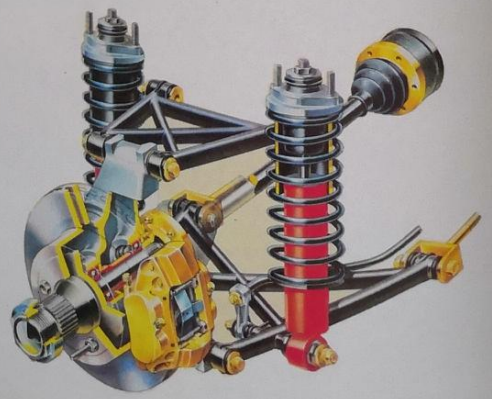
Construction
Location: Central, to the rear. Longditudinal.
Type: Ferrari F113A, Boxer, flat 12-cylinder.
Cooling: Water, with lateral radiators.
Construction material:
Block: Cast iron with aluminium removable cylinder liners, and Nikasil cylinder walls.
Head: Aluminium alloy.
Pistons: Forged in aluminium alloy.
Rods: Forged steel.
Crankshaft: Forged steel.
Crankshaft bearings: 7 main.
Distribution: Belt-driven double OHC per cylinder row, 4 valves per cylinder.
Ignition: "Microplex" Marelli electronic.
Fuel system: Bosch K-Jetronic mechanical indirect injection. Air gauge and injection distributor for each row of 6 cylinders.
Lubrification: Dry sump.

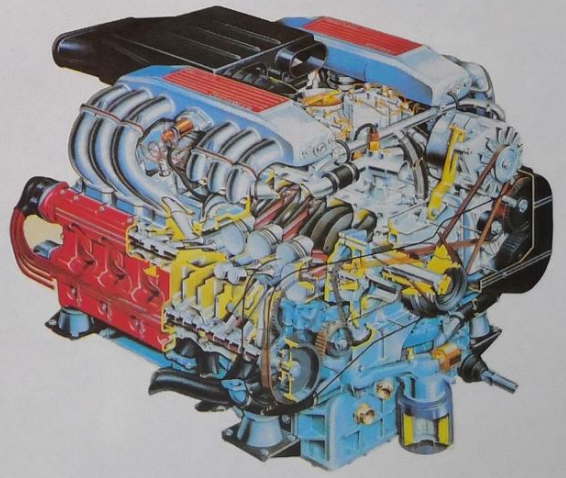
Specifications
Engine size: 4942cc
Bore and stroke: 82 x 78 mm
Swept volume per cylinder: 411.8cc
Compression ratio: 9.2:1
Angle between valves: 41°
Maximum power: 380 bhp at 6300 rpm
Maximum torque: 50 mKg at 4500 rpm
Maximum revs: 6800 rpm
Specific power: 78.9 bhp/l
Linear piston speed at maximum power: 16.4m/sec at 6300 rpm

TRANSMISSION

Type: rear wheel drive.
Gearbox: Ferrari 5-speed manual + reverse.
Arrangement: Longditudinal, under engine.







Clutch: Double dry plate, hydraulically operated.
Differential: ZF limited slip differential (40 %).
Final drive ratio: 3.214: 1 (14/45).
Engine-gearbox reduction gear: 27/29.
Gearbox ratios:

	Maximum speed/ 6800 rpm
1st: 2.923: 1 (13/38)	81 kph/50.6 mph
2nd: 1.865: 1 (16/30)	126 kph/78.7 mph
3rd: 1.421: 1 (19/27)	166 kph/103.7 mph
4th: 1.087: 1 (23/25)	217 kph/135.6 mph
5th: 0.815: 1 (27/22)	289 kph/180.6 mph

BODY/CHASSIS

Structure: Tubular steel frame and aluminium bodywork (steel roof and doors). Removable rear portion for access to engine block.
Bodywork: 2 door, 2-seater Ferrari-Pininfarina Berlinetta GT.
Suspension:
Front: Independent by wishbone, mounted on special welded steel tubes, coil springs/concentric Koni hydraulic damper unit, anti-roll stabiliser.
Rear: As front, with twin spring damper assemblies.
Steering: Rack and pinion, turning circle lock to lock: 3.45. Turning circle between kerbs: 12 m. Height-adjustable steering wheel.
Brakes: Four ventilated discs, placed in wheels with four-piston calipers.
Disc parameter: Front - 301 mm; rear —296 mm. Hydraulically operated, split front/rear circuit, servo assisted. Mechanical hand brake operating on rear discs.
Wheels: Forged aluminimum one piece rims.
Dimensions: Front — 210 TR 415 (or 8" x 16").
Rear - 240 TR 415 (or 10" x 16").
Tyres: Michelin TRX (or Good Year NCT).
Dimensions: Front - 240/45 VR 415 TRX (or 224/50 VR 16).
Rear - 280/45 VR 415 (or 255/50 VR 16).

DIMENSIONS AND CAPACITIES

Wheelbase: 2,550 mm
Front/Rear track: 1,518/1,660 mm
Overall length: 4,485 mm
Width: 1,965 mm
Height: 1,130 mm
Fuel tank capacity: (2 light alloy elements): 115 litres
Unladen weight: 1,506 kilos

PERFORMANCE FIGURES

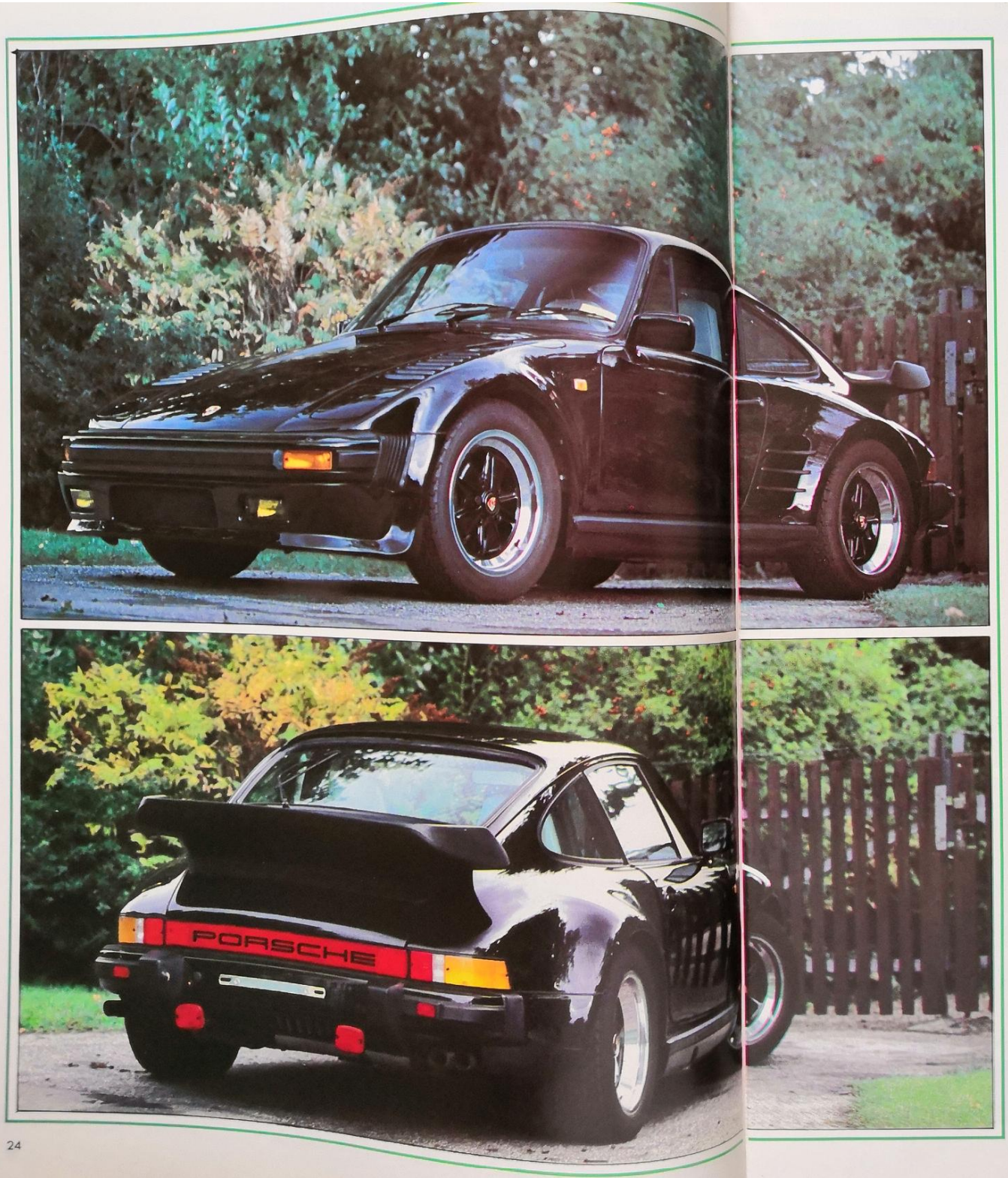
Maximum speed: 290 kph
Acceleration from rest to 100 kph: 5.8s
Standing 400 m: 13.6s
Standing kilometer: 24.1s

FUEL CONSUMPTION (Constructor)

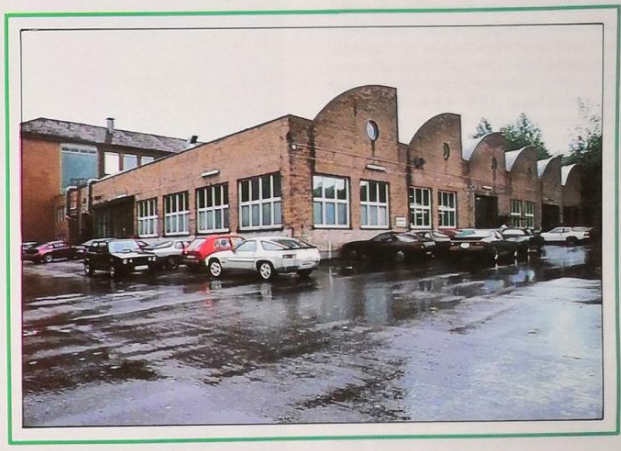
European standards:
9.9 l/100 km at 90 kph
11.8 l/100 km at 120 kph
Urban cycle: 23.7 l/100 km

PRICE

Italy: 160,080,000 Liras (net)



THE MADE TO MEASURE PORSCHE



PORSCHE HAVE ALWAYS TRIED TO MEET THEIR CLIENTS' REQUIREMENTS. NOW, WITH THE INCREASING DEMAND FOR PERSONALISED MODELS, THE GERMAN MANUFACTURER'S ZUFFENHAUSEN FACTORY HAS OPENED A SEPARATE DEPARTMENT SPECIALISING IN THIS FIELD — "PORSCHE SONDERWÜNSCHE".

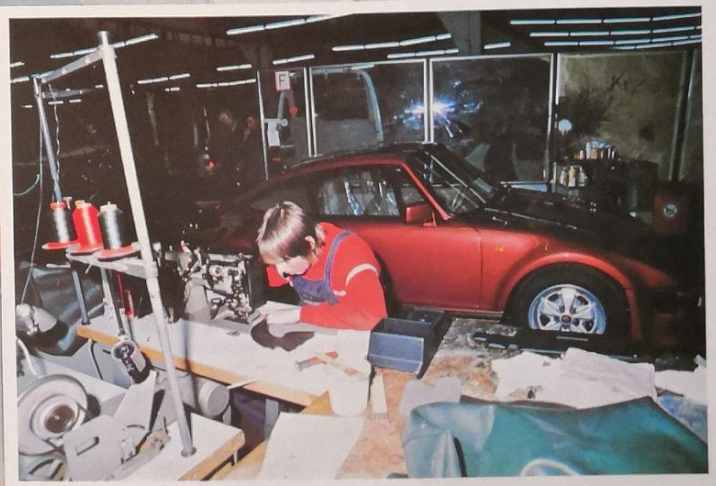
Finding the factory is no problem. Simply take the Zuffenhausen exit from the Stuttgart motorway, and it's straight on. On your left you'll soon notice the complex where the 911 is built. The old factory is sign-posted to the right and it is here that the after-sales workshops have been set up. The brick building is built around a courtyard and Ferrari lovers couldn't fail to note its similarity to the Maranello workshops. Access is strictly controlled. Various Porsches wait on the crowded car-park for their owners to pick them up after visits for servicing. German number plates dominate but foreigners, too, bring their cars here for tuning or for modifications. In either case, the majority are 911s. Some of the cars there stand out amongst the others because of their modified bodywork, more luxurious interior, or paintwork you won't find on any dealer's options list. Most of this modification work will have been carried out here at Zuffenhausen but, then, you can tell. There's something about the finishing.

SAFE AND LEGAL

It is three years since they began carrying out modification work at the Zuffenhausen workshops. This work concerns both the mechanics and the aesthetics and comes under the control of the after-sales department which employs 170 people. Apart from catering for the

current personalised-car trend, the after-sales department covers activities like repairs and servicing, restoration of old Porsches, the distribution of competition parts for the Porsche range and the modification of 911s or 944s, respecting the technical legal requirements of different export markets. Mr Sprenger, our host, was eager to underline this last point. Porsche are proud of their reputation for quality and are worried that many of the independent companies that have set themselves up as Porsche specialists recently, are a threat to this reputation. The German manufacturer is naturally conscious of the recent fashion and care has been taken to design a range of quality conversions, which, at the same time, do not jeopardize the road-legality of the car. For this reason, power output for the 930 engine conversion has been limited to 330 bhp. The conversion includes a special four-branch exhaust system, an oil radiator and modifications to both the turbo and to the intercooler. The result is a top speed of almost 170 mph (270 kph), which means that the standard P7s, not guaranteed by Pirelli at such speeds, have had to be replaced. After testing at Weissach, Dunlops were chosen. Mr Sprenger's department works regularly with the Porsche R & D department but this purely on a paying, consultancy basis. After-sales are just another customer to the research team. However, the exacting Porsche owner can in this way, expect quality work in accordance with appropriate technical standards. The 330 bhp, 3.3 litre Turbo passed the noise and anti-pollution tests with ease but, when you think about it, the equivalent of over $7,000 seems rather a lot for just 30 extra horsepower.

But, if that tempts you, you needn't stop there. You may as well go the whole way and order the special body conversion along with the personalised interior. The body conversion features a flat-nose with retractable headlights, a redesigned spoiler housing the oil radiator which comes with the 330bhp engine kit, the rear arches incorporate air-intakes and running-boards are fitted. All the extra body parts are hand-worked and the full conversion costs the equivalent of over £13,000.



The Cabrio's hard top is entirely hand-made.

The interior of the 930, from the switches to the seats, is upholstered in white leather.

All the upholstery work is carried out at Zuffenhausen.

IN FOCUS

The personalised interior includes, of course, leather everywhere, including instrument surrounds and the switches for the electric windows. Wood is used for the dashboard, a new central console design houses the telephone and stereo, as well as a fold-away cassette storage rack. You can fit a new steering wheel and gold insignia finish of the conversion. The price for all that is around £5,000 which doesn't include the optional Recaro seats. A similar conversion is available for the Porsche 928S but, for the body kit, prices are based on individual estimates. The 930 that I was driven in was a veritable dream car but I couldn't stop myself from asking how the white leather interior stood the test of time. *"We always remind our customers that white leather can be a bit dazzling but they insist and, of course, the customer is always right,'* underlined Mr. Sprenger. It was, in fact, the exacting requirements of a customer that led to the 'flat-nose' conversion. The buyer in question had insisted the work be carried out without resorting to the use of fibre-glass, widely used by customising 'specialists'. Now fifty such conversions are carried out each year and the tooling is even beginning to pay for itself.

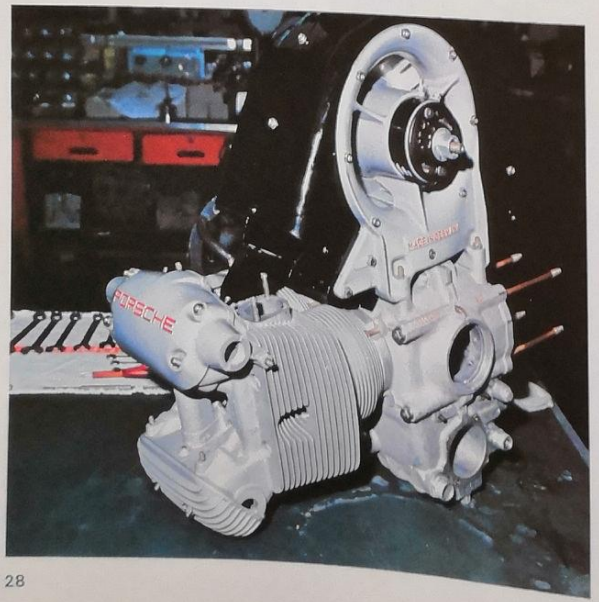
HARD TOP

A similar story resulted in the hard top used on the Cabrio. For the moment, this item is entirely hand-made and there is no fixed price for it, although we can guess that it is reasonably high. This magnificent removable roof, with exactly the same lines as the coupé model, was designed at Weissach. The fitting of this reinforced part is extremely delicate and can only be carried out in a specialised workshop. Like on the 356, the entire top has to be dismantled and only a very, very experienced client would be able to assemble and set up everything correctly. Ensuring the perfect operation and waterproofing of the electric windows is not at all easy. The Cabrio hard top, one of four versions of the 911, is restricted to the wealthy who only take it off once a year on the Riviera !

THE CLIENT IS KING

From the early days, Dr Porsche made it clear to his staff that the client is king, that Porsche should try and respect special requirements even if that wasn't particularly profitable. For this reason, one of the activities of the Zuffenhausen workshops over the last 12 years, has been to restore old Porsches. Mr Sprenger himself owns a Cabriolet 356B which was restored a while ago and, even today, this classic looks new. An average of seven or eight classics and

An extremely rare 2-litre Carrera GT which has been put back on the road by Mr. Spenger's talented group of engineers. The 4-cylinder, 2-litre engine is similar to the one below.



perhaps two or three racing cars are brought back to life here each year. The cost of restoring an ordinary Porsche at Zuffenhausen would put off most proud owners, but the fact remains that enthusiasts do come from all over the world to have their Porsches worked on here. Recent clients have come from France, Greece, Venezuela and the States.

To date, a 917-30 and a very old 356 have been the most difficult projects carried out at Zuffenhausen, where only complete restorations are accepted. There are no half-measures. True, they will tackle either engine or bodywork/chassis work but, in either case, only for complete rebuilds. Estimates are respected as closely as possible but, in this line of work, unseen problems often create surprises in the final bill. If you prefer to do the work yourself, Porsche Special Products might be able to help you out. This section was created in 1983 in an effort to guarantee a supply of rare and/or obsolete parts. Building up a complete stock of parts will take time but they feel that this is the anwer to a real client need and Porsche are definitely setting an example in this field. ■

Porsche Sonderwünsche
Mr Elmar Willrett
Tel. : (49) 711 82 03 330
Telex : 721871

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CIGARETTES CAN SERIOUSLY DAMAGE YOUR HEALTH

HA HA!

THIS IS NOT WHAT YOU THINK IT IS! IT'S IN FACT A VOLKSWAGEN BEETLE ENGINE HIDING UNDER SPECIAL BODYWORK SUPPLIED BY COVIN PERFORMANCE MOULDINGS. AND IF I HEAR ANYONE SAYING THAT THIS IS A 930 REPLICA... I NEVER SAID ANYTHING ABOUT PORSCHE TURBOS, I MEAN, DID I?

The three of us couldn't believe the sight that greeted our eyes as we opened the spanking new workshop doors. Yes, the car that was waiting patiently there in front us was the one that we'd seen in the paper. And it really did look like a (blank) Turbo. The entire bodywork, wings, engine cover and shell, were all made out of polyester. This was really a sight for sore eyes — not only it wasn't a (blank) 930, but it wasn't an old 911 polished off by the Almeras Bros either. The whole thing was plastic — nothing but plastic ! The only clue came from the word COVIN on its shiny backside. At that point we all burst out in fits of nervous giggles. It was so absurd ! The bumpers, front spoiler and large winglet had all been moulded out of fibre-glass, and then either pigmented or painted over. The Stuttgart supplier had obviously sent along the windscreen and panes. The door handles, rear lights and indicators were all genuine. The big give-aways were the short turning circle of the BBS-style wheels and the common-looking rear view mirrors.

The cockpit didn't quite match the real-stuff quality of the exterior, but was cleverly designed all the same. The mock-leather dashboard had come straight from the moulding and the seats were just about recognisable as *"original fakes"* — in other words the kind of reproduction work you get on Dinky toys.

Lifting up the engine cover though, our hearts missed a beat. What was a common flat-four Beetle engine doing there? Why couldn't they have featured a (blank) six-cylinder engine ? Ditto for the front cover under which the VW fuel tank was tucked away, with the filler cap spouting through the wing — like on the real one.

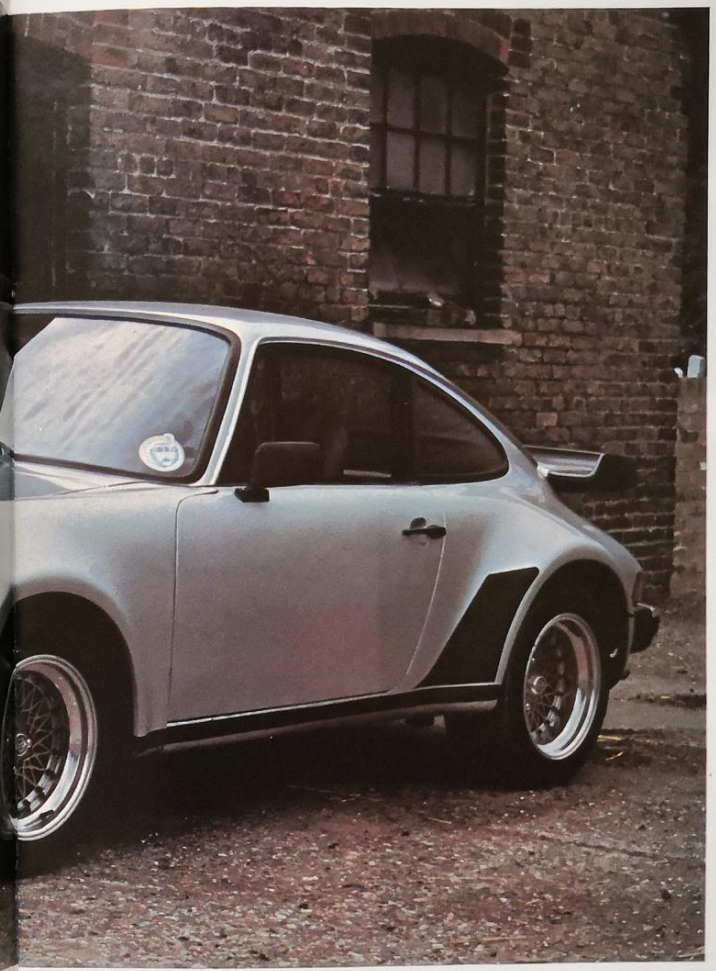
Things started going downhill as we started up and pulled away. The gear lever was the kind your grand-dad would have used, and the engine had no torque whatsoever.

It sounded just like a sewing machine. It was dreadful, but we couldn't help laughing all the same. Honestly, between you and me, any competent mechanic could have produced a good piece of work by simply featuring the mechanicals of a 2-litre 911 S and revising the suspension. The idea was a great one to begin with really...

A TURBO FOR A COUPLE OF GRAND

The COVIN kit comprises a polyester double-skinned shell which makes up the entire rear portion. Metallic struts add to overall rigidity and the whole unit is placed on a shortened VW base (the wheelbase is now 2.27 metres long). The wings are bolted down into place. For around £2,000 you get all the bodywork, the windows and the dashboard. If you are prepared to spend a further £700, you'll also find the instrument panel, the electrics and the interior trimmings, including the seats, in your gift-pack. If the idea of shortening a chassis puts you off, an off-the-peg one can be yours for £450. In other words, with just over £3,000 you can build your own Turbo.

The COVIN is a clever prankster's car, even if the overall quality is somewhat dubious. If you are interested in doing your own car up like this, you must be warned that it'll have to pass the road worthy inspection tests, and we all know what a headache they can be... However, the operation is rather tempting when you think about it, isn't it? ■



There's no doubt about it - it does look like the engine out of a Beetle, and it is. Its polyester protective shell also resembles a much-acclaimed GT from Swabia.

Covin Performance Mouldings
5 Redhills Road
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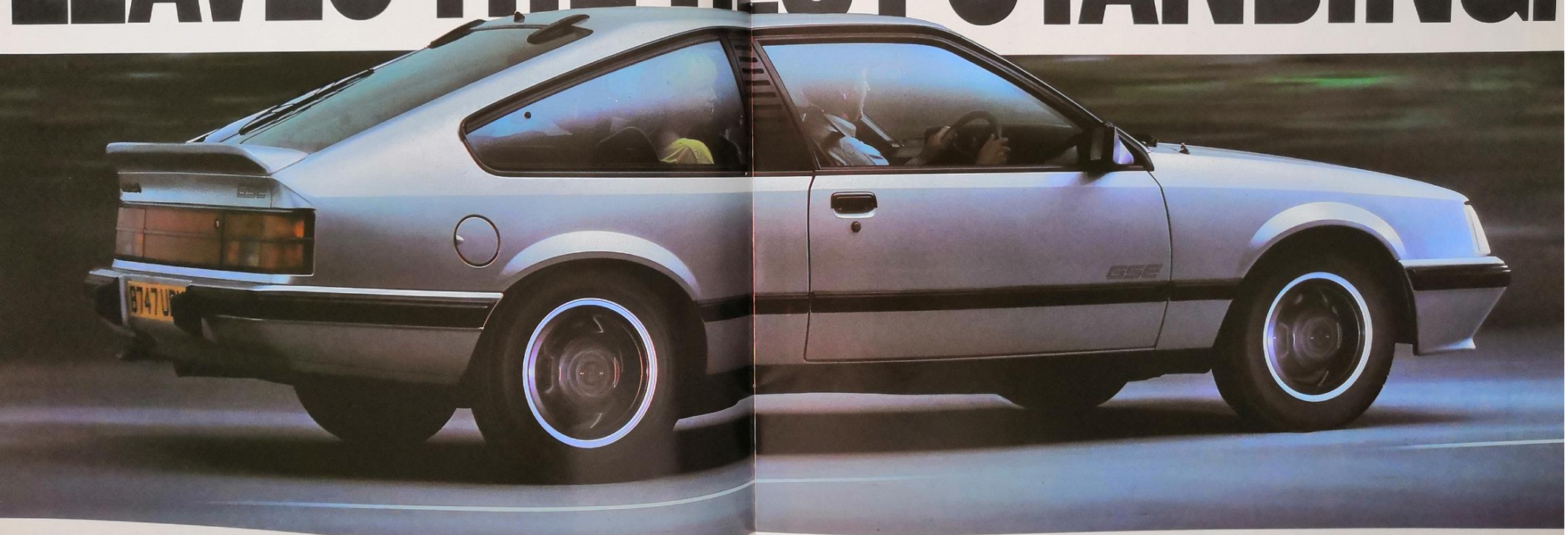
Tel: (44) 24532 3788

SEATS FOUR IN COMFORT. LEAVES THE REST STANDING.



It's not every day four adults can travel together in a luxury car capable of over 130 mph.

But then, this is no every day car.

The new Monza GSE is an altogether rarer beast; a modern Grand Tourer.

As such a title implies, the lusty 3-litre, fuel-injected, 180 bhp engine doesn't pull any punches.

From rest, 60 mph can be attained in a mere 8.2 seconds.

Coping with acceleration like this calls for proper road-hugging, ultra low profile tyres.

In poor conditions, it also calls for a limited slip differential to improve traction.

Equally advanced is our optional ABS anti-lock braking system.

It ensures you'll stay on the straight and narrow even under the severest braking.

The Monza GSE is also well-served in the gearbox department.

Our 5-speed manual transmission is as responsive as any you could wish for.

While the new 4-speed automatic now enjoys improved acceleration in the lower gears and an additional overdrive gear for more economical high speed cruising.

For an out and out performance car, the interior of the Monza also leaves nothing to be desired.

Up front there are plush Recaro seats. Beyond them, an impressive LCD instrument panel and 7 function trip computer.

And above, a sliding, tiltable sunroof.

The windows and mirrors are electrically operated. Power steering and central locking are also at your command.

At speed, wind and engine noise are notable only by their absence.

The cost of travelling in such grace and refinement on the Queen's highway? £13,801. Hardly a King's ransom, all things considered.

BACKED BY THE WORLDWIDE RESOURCES OF GENERAL MOTORS

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PERFORMANCE FIGURES FOR 5-SPEED MANUAL FROM MOTOR MAGAZINE. PRICE CORRECT AT TIME OF GOING TO PRESS, INCLUDES CAR TAX AND

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LANCIA DELTA S4

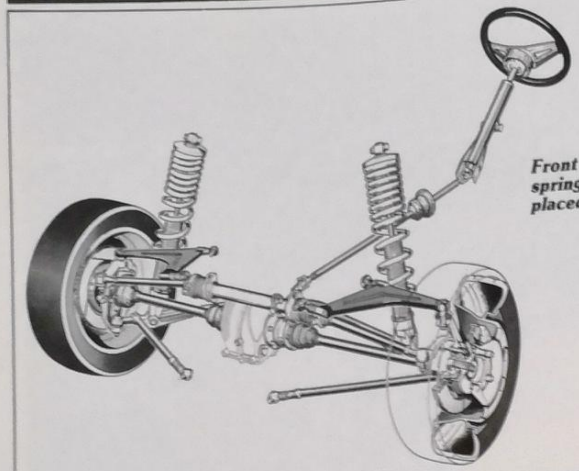
PEUGEOT ARE ALREADY OPERATIONAL, FORD HAVE JUST PRESENTED THE RS TURBO AND, NOW, HERE IS LANCIA'S REPLY — THE DELTA S4. WATCH OUT GROUP B, HERE SHE COMES!

The Lancia S4 exists. We've seen it, we've touched it. However, like its cousins Ford and Porsche 959, the Delta S4 will not be homologated until June, which means that it will miss the first half of the 1984 season. The 1000 Lakes Rally will probably be the scene of the big confrontation of the year — if everyone keeps their promises — and the Peugeot 205 Turbo 16 will have its work cut out to defend its 1984 victory if the Ford and the Lancia Delta are present. The second half of the season will possibly lack in spice as, if everything goes according to Jean Todt's plans, Peugeot should have clinched the title before then. Unless the Audi Quattro Sport manages to get its act together for 1985.

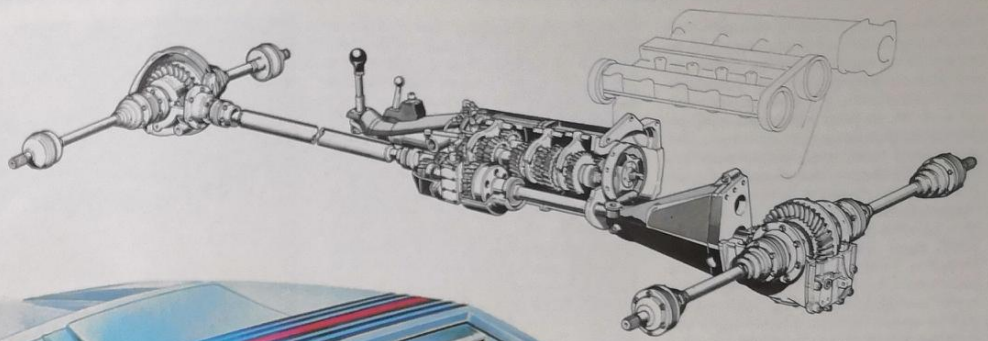
For the time being, let's take a close look at what will be the replacement of the brilliant 037 which Lancia will have to use during the opening rounds of the 1985 season. The press presentation was held in Turin at the Abarth factory, with the journalists seated and the staff standing around in their work clothes, just as eager as we were to discover the much-acclaimed new-comer. We were first shown videos and films, culminating in the unveiling of the real thing with Attilio Bettega and Markku Alen behind the wheel. Markku then came down from the make-shift podium to answer the questions put to him by his boss concerning his impressions of the Lancia Delta S4. Alen, who has been driving for the Fiat Lancia group for eleven years now, confirmed Fiorio's thoughts that the Lancia was a fantastic car. Mind you, he couldn't really have said much else!

Unlike Ford, Lancia presented the evolution model which will be continuing its development programme over the next few months. The competition debut of the S4 will probably be the 1000 Pistes in France in July, an event which accepts prototype cars.

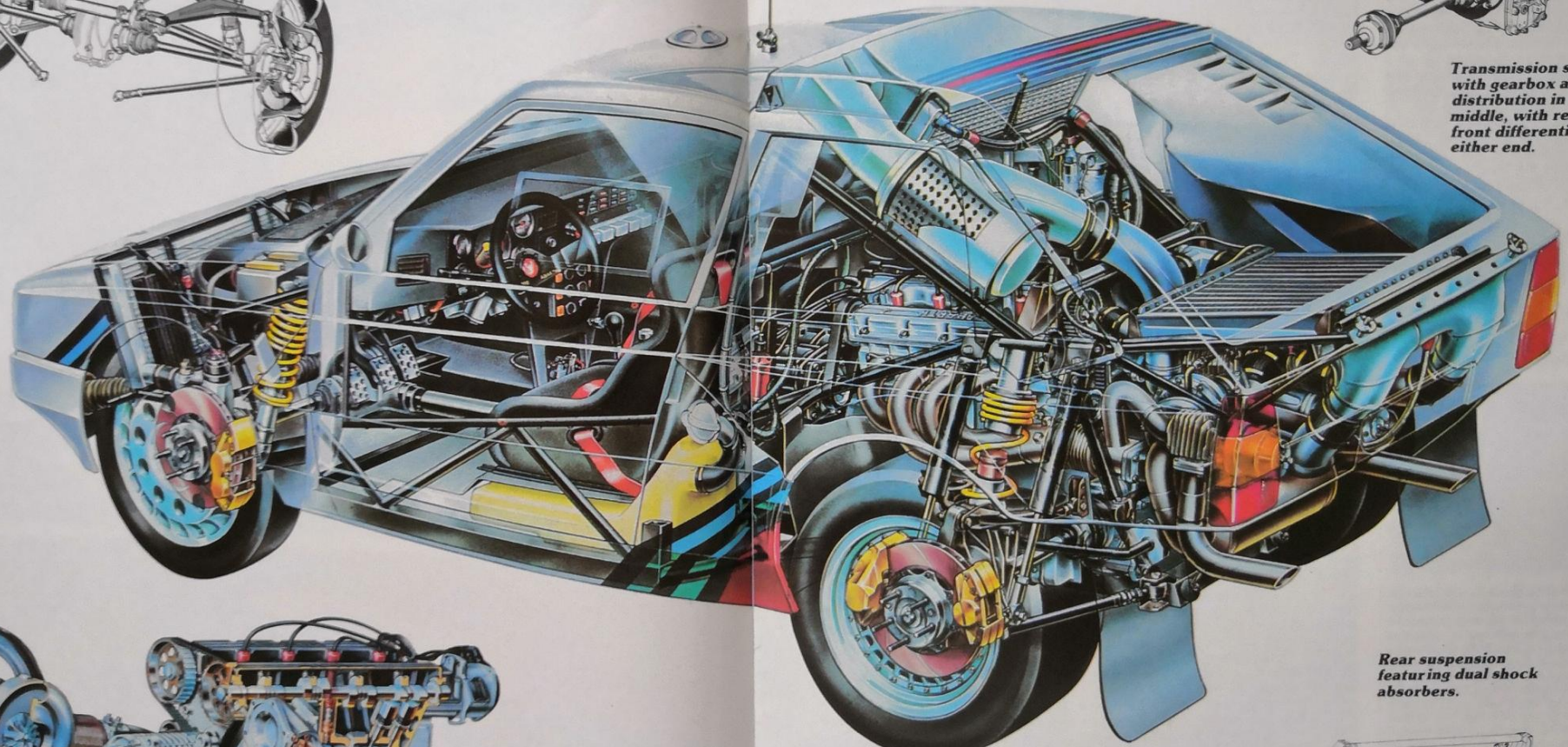
Work on the S4 began in May 1983 when the choice of Lancia Delta as a base was finally decided upon. Unlike the Peugeot 205, the S4 features a longditudinally positioned engine and the possibility of two-wheel drive when needed. But the outstanding feature on the S (supercharged) 4 (4-wheel drive) is the fact that the Volumex (volumetric compressor) which has already been fitted to the 037 and certain production models to give more power at low revs without increasing throttle lag, has been fitted, together with a turbocharger, to give more power at high revs. If the engineers have done their home work thoroughly, this combination will be a definite advantage. The Abarth technicians should be congratulated for being so audacious and for wanting to stand out amongst their rivals. The tubular chassis weighs in at 100 kilos and nomex, kevlar and carbon fibre body panels are fitted, increasing the rigidity of the shell. The new engine is placed longditudinally, inclined at 20° behind the gearbox, in order to give the optimum weight distribution ratio. The gearbox is combined with the drive regulator which controls the power distribution to the front and rear differentials. As a result of this central differential, the torque ratio can vary from 75-25 % between the front and rear, to 60-40 % (ideal for tarmac). A central blocking system has been incorporated to revert the car into an "*ordinary*" rear-wheel drive. The S4 is powered by a four-cylinder, 2 OHC, 4 valves per cylinder Abarth engine with a total swept volume of 1759cc. There is a five-bearing crankshaft and an aluminium cylinder head. The engine is classical, the originality lying in the double supercharging system. High power at low revs is produced by the normally-aspirated Volumex supercharger which is placed to overhang the rear axle. It is driven by a crankshaft, itself driven by a

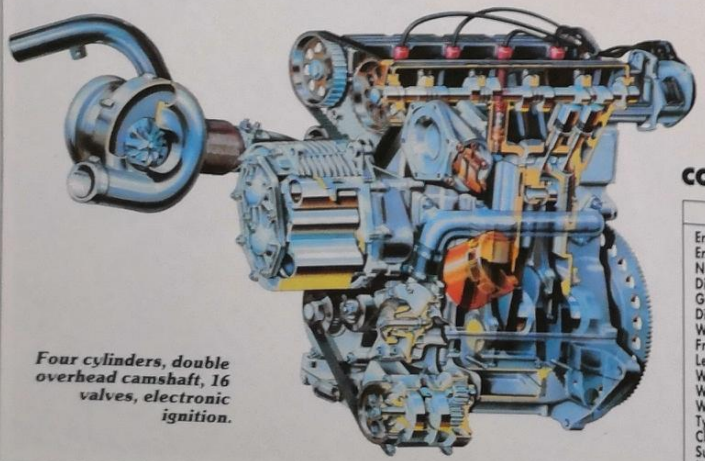


Front suspension with spring/absorber units placed further back.



Transmission system with gearbox and drive distribution in the middle, with rear and front differentials on either end.



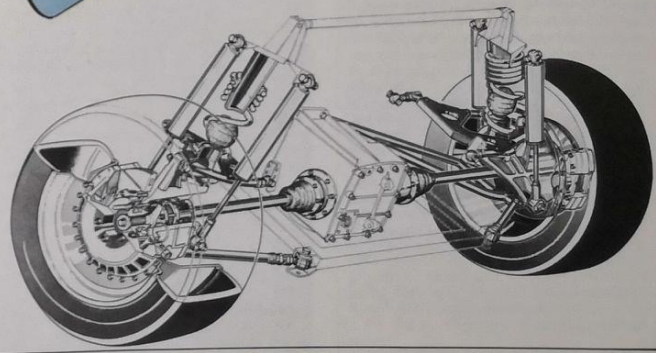


Four cylinders, double overhead camshaft, 16 valves, electronic ignition.

COMPARISON FIGURES

	LANCIA DELTA S4	PEUGEOT 205 T 16	FORD RS200
Engine	Central, longditudinal	Central, transverse	Central, longditudinal
Engine size	1759cc	1775cc	1800cc
Number of cylinders	4	4	4
Distribution	2 OHC - 16 valves	2 OHC - 16 valves	2 OHC - 16 valves
Gearbox	5 speed, Central, longditudinal	5 speed, Rear, transverse	5 speed, Front, longditudinal
Differentials	3	3	3
Wheelbase	2.440mm	2.540mm	2.530mm
Front/rear track	1.510/1.535mm	1.400/1.400mm	1.520/1.497mm
Length	3.990mm	3.825mm	4.000mm
Width	1.880mm	1.674mm	1.752mm
Weight	890 kilos	890 kilos	960 kilos
Wheels	16"/8" - 12"	390mm - 16"	16"/8"
Tyres	Pirelli P7	Michelin TRX	Pirelli P7
Chassis	Tubular	Tubular	Monocoque
Supercharger	Volumex and KKK Turbo	KKK turbo	Garrett turbo
Horsepower	400 bhp/8000 rpm	300 bhp/7500 rpm	380 bhp/7500 rpm
Maximum torque	40 mKg/4000 rpm	40 mKg/5000 rpm	—

Rear suspension featuring dual shock absorbers.



series of pinions. Once more sustained engine speeds have been reached, a system of valves shuts off the Volumex, and the turbocharger then continues with the work. It is a KKK turbo, combined with an entirely electronic ignition system and a large air/air intercooler placed well to the rear, lying almost flat. The specifications sheet gives the engine producing 400 bhp at 8000 rpm with a maximum torque of 40 mKilos at 5000 rpm — with as much as 30 mKilos at 2500 rpm! The intercooler works on both the Volumex and the turbo. The compression ratio is 7:1. The suspension system remains somewhat classical with a false upper wishbone to the front and a large lower triangle made up of a transversal bar and an adjustable one as on the 037. The rear has been fitted with a large lower trapezium and an upper triangle strengthened with steel elements. Identical dual shock absorbers to those fitted to the 037 have been placed to the rear, whereas the front spring/absorber unit is positioned further back because of the wheel shafts.

A large water radiator is placed to the front of the car along with the spare wheel. The intercooler and voluminous oil radiator have been placed to the rear just under the roof. The intercooler is fed through side air inlets and the fuel tanks are under both seats. Crash tests have apparently proved the rigidity of the front unit. We were informed that the car was driven into a concrete wall, head on, without either the doors or the windscreen bending, despite the relatively high crash speed of 35 mph. The 937 has come up for much criticism, especially after Bettega's terrible accident at the 1983 Tour of Corsica. Compared with the 037, the S4's drag coefficient is down by 12%. Pirelli P7 tyres have been chosen to equip the 16" wheels. Dual-piston, 300 mm diameter Brembo discs are placed inside the wheels. The front and rear portions of the body have been designed to be easily and quickly removed. At present, the car weighs in at 960 kilos, but it is planned to slim it down to the minimum authorised Group B weight of 890 kilos for its engine size (less than 2500cc after applying the coefficient ratio). So, is the Lancia going to prove itself a worthy rival of the Peugeot? They both feature similar technical concepts. Suspense guaranteed until the first confrontation takes place.

A gripping fight out is up on the cards but, until then, two hundred cars have to be constructed to pass the homologation requirements. We've been told that a good hundred will be up for sale!

The 037 has half a season in which to hold its own and prepare the path to victory for its off-spring. It is hoped that the S4 will follow in the tracks of previous famous names like the 1600 HF, the Stratos and the 1983 world champion, the 037 which managed to make up for lack of power by proving time and time again that it was reliable and easy to handle on certain terrains against its main rival of the day, the Audi Quattro.

LANCIA'S GROUP C CALENDAR

Lancia will pursue its rallying activities next year and will also continue to show a keen interest in Group C, despite its budget being half that devoted to rallies. Two V8 Ferrari-engined Lancia LC2s will be featuring a new injection system in order to comply with the new 1985 ruling, calling for a reduction of 15%. This model had a win at Kyalami in 1984, on its maiden-outing and will defend the Lancia and Martini colours throughout the world championship. Obviously, good early-season results putting the team in the running for the crown, would probably result in a supplementary budget being made available. The Patrese/Nannini and Wollek/-Baldi teams will continue driving for Lancia next year, with P. Barilla as the first reserve (i.e. for races like Le Mans). The main change concerns the tyres and the unexpected choice of Michelin rubber. The most plausible explanation being that since Michelin's withdrawal from F1 for economical reasons, the French company has decided to back Lancia the whole way, but Fiat have stopped them from any hopes they might have had in rallying by insisting on Pirelli tyres. Therefore, it seems that by developing Group C casings, Michelin wants to safeguard its technical know-how and prepare the terrain for an eventual Renault come-back to this discipline. But that's a long way off at the moment. A colossal amount of work will have to be undertaken regarding the suspension, seeing that the LC2 was first designed to use Pirelli rubber, then Dunlops and now radial Michelins. Wollek will begin testing at Misano.

The A 112 replaced by the Uno

Lancia and Fiat have made a number of changes to their promotional activities. The Panda and Fiat Abarth Formulae will be held again next year, whereas the Autobianchi A 112 Rally Challenge, which opened doors for Bettega eight years ago, has been replaced by a Fiat Uno Championship. Either 70 S or 70 SX models can be used and must comply with Group N regulations. The championship will be based on nine Italian rounds, all of which qualify for top level championships. A prize-fund of 250 millions Liras has been attributed for the season. Foreigners will also be able to take part, all you have to do is buy the preparation kit marketed by Abarth (roll cage, lights, belts, extinguisher, sump guard) and the car itself. An open *"Panda Ice Trophy"* has also been created as from next year for Panda 4 x 4s, consisting of five classical winter events: the Sestrière 24 Hours, Serre Chevalier, the Livignon 24 Hours, the Chamonix 24 Hours and the Pragela Ice Race — all of which will be held over five successive weekends from January 12th to February 17th. The prize money is estimated at a total of 50 million Liras. Once again, the challenge is only open to Group N cars.

WHEN, WHERE AND HOW?

Audi have perhaps been crowned the world rallying champions and Porsche likewise in Endurance but that doesn't mean that Cesare Fiorio's 1984 season was devoid of good results. At the press conference he announced who will be making up the ranks of the squadra italiana next year. Unsurprisingly, Markku Alen has signed on for another two years and Henri Toivonen for three — they're doing everything they can to keep him — and Bettega's contract has him staying on for another year with an option for 1986. These three drivers will thus constitute the official works team, backed, as in previous years, by Martini. 037s will be used for the opening round, the Monte Carlo. Alen, Bettega and Vic Preston Jr (exceptionally) are down for the Safari. Alen, Toivonen and Bettega will be at the Portuguese, Corsican and San Remo rounds but only the Finish duo will be at the 1000 Lakes and the RAC. What about the 1983 European title winner, Biaison, who put in an absolutely brilliant performance at the 1984 Tour of Corsica, followed by a repeat performance at the San Remo? Well, he will again be at the wheel of an identical works car, sporting the Jolly Club colours. His team mates will be Dario Cerrato, Antonella Mandelli — the 1984 European Lady's Champion, Tizano Chiti (the 1984 Fiat Ritmo challenge winner) and Michele Rayneri. The *"Tre Gazzelle West"* team are entering Bettega Mauro Pregliasco, G. Noberasco (ex-Alfa Romeo), Harri Toivonen (Henri's brother) and Stefano Fabbru, the Italian Group N Open Rallying champion. The double Belgian title winner, Patrick Snijers, will have an 037 in Bastos colours for 1985, also entered by Tre Gazzelle. The missing man off this list is the present European rallying champion, Carlo Capone. Will he get the Porsche that was planned for Biasion? The Lancia 037s are even more powerful than before with their 325 bhp. Some say that they don't weigh in at the minimum authorised weight. When questioned, Fiorio replied — *"Our twenty years' experience in top level international rallying should be a guarantee in itself."* No-one, however, bothered to bring up the question why two mechanics were needed to carry the exhaust pipe which the Scuderia then proceeded to change at the end of the 1984 rounds. Probably just a case of brotherly love or, rather, Latin solidarity! ■

MIKKOLA AND SURER SWOP OVER

WHAT ARE THE ODDS IN FAVOUR OF AN EXCELLENT RALLYMAN PUTTING IN THE SAME KIND OF LAP TIMES AS A MODERN F1 DRIVER ? AND , VICE VERSA - CAN A F1 DRIVER REALLY PUSH A RALLY CAR TO THE LIMIT? HANNU MIKKOLA AND MARC SURER EXCHANGED CARS AND FOUND OUT FOR YOU...

"In a turbocharged Formula 1 car you feel like you're taking off over this bump," said Marc Surer with a background tinge of wonderment in his voice. The red Hertz Ford Escort was unperturbed, simply shivering a little onto its springs. Chicane. Right-left, a little drift on the exit, hands tugging at the wheel, foot hard on the floor.

Redgate Corner, deceptive right, just after the pits. In his Barclay Arrows 17-BMW, Marc Surer approaches it flat in sixth gear : the bend is taken in third. *"Always miss one gear as you go down,"* explains Surer, as the Escort tried to wrestle beneath his ten-to-two grip on the steering wheel. *"The engine in the Formula 1 car doesn't respond quickly enough. So you miss out one gear... oh, and mind the kerbs."*

"WHEN YOU GET TO FOURTH, FIFTH AND SIXTH, IT'S JUST FANTASTIC."

This orange-leaved November morning is wet and cold and slimy over Donington Park's immaculate asphalt. Surer is powering the Escort through the downhill sweeps of the Craner Curves, skinny rental-car radials offering nudging protest. *"In the dry, this left-hander is flat if the car is perfectly balanced. You get top speed here — I even think it's faster than at the bend of the straight."* His voice tautens. *"Full on brakes — now! This is a nice piece to drive. Change to the other side of the track, down to fourth. Until they moved that wall back,"* — Surer points at a strip of bland concrete topping a green-grass bank — *"this used to be the corner where you could have a big accident. You would spin and hit the wall."* This is related very matter-of-fact, the package tour lap of Donington. The Escort wriggles once more, Surer grimaces. *"Bloody front-wheel-drive — still, the balance is not bad."*

In less than 90 minutes, Surer's Arrows would be driven around that greasy-topped circuit by a man who, before he sat in a bag of warm foam in the Arrows factory yesterday, moulding a crusty torso-hugging seat, had never snuggled into a single-seater racing car before. The strange name was Hannu Mikkola, and this morning he was late. Yesterday he flew from his winter home in Florida to London Heathrow, and was then taken by his mentor, mate and man-about-Audi Sport UK, David Sutton, to his Arrows Milton Keyne headquarters for a fitting and a final briefing. He was tired, he was jet-lagged and he was suffering from what was most easily described as a mild run-in with the flu. Last night he slept, woke, talked and tried to rest again. Disprin did little to ameliorate this circadian disrythmia. So while Surer warmed himself in front of the Arrows pit space-heater, Mikkola was curled up in the front of Sutton's Audi 80 Quattro, chaffeured to a race track he had driven around once before. Three years ago. In a standard Austin Metro.

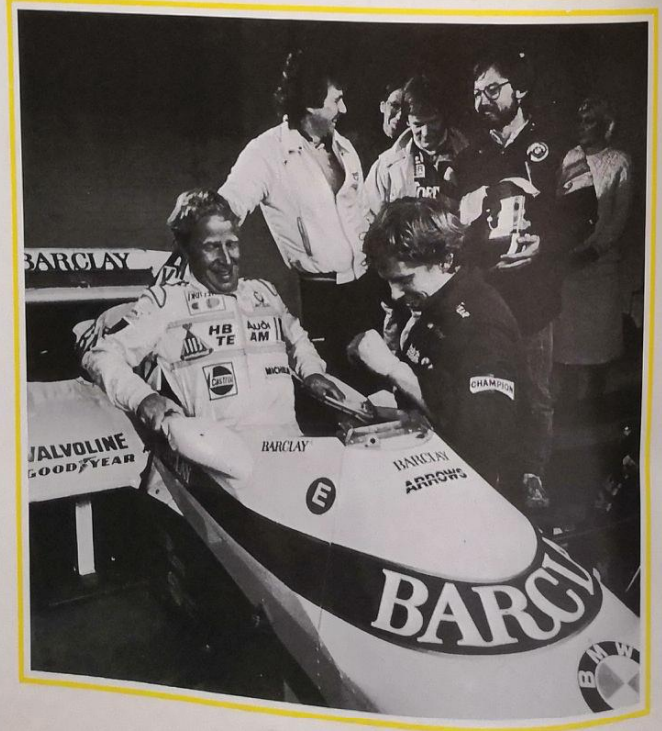
But why? Why put Hannu Mikkola into Marc Surer's Arrows. Or why let Surer on the loose in a full works HB Audi Sport Quattro? In the media-baiting way of 1984, the answer was video. This was to be a television special for a number of European countries, an evaluation of two professional drivers under the arc-lamp glare of a Sony U-Matic camera, coincidentally promoting two cigarette brands marketed by the same multinational. And if television gave the day its form, so the zoom-lens intrusions also stepped up the pressure. Spin here, and the world would know. This event might be from the margins of the motor-sport season, but it would not make more than a few lines on a slack sportspaper. Video provided the spur.

Hannu Mikkola would drive the Arrows A7-BMW, a good middle-grid Grand Prix car of aluminium honeycomb and slivers of carbonfibre. Through 1984 it had been lengthened in wheelbase and stiffened in its rear suspension components — this was Arrows first season in living with BMW M-Power. The best result for the team had been the Thierry Boutsen-Marc Surer five-six finish at the Austrian Grand Prix. Designer Dave Wass had aimed to get the car touching the 540 kilo minimum weight limit — BMW provided a claimed 750 race-bhp, and 850 qualifying-bhp. The Formula 1 motorhome pundits would point to Nelson Piquet's nine BMW-powered '84 pole positions and mutter about that latter figure being *very* conservative.

Marc Surer was to try the Audi Sport Quattro, a perculiarly runtish Ton Toy of a rally car, complete with a Quattro logo moulded into the plastic rear window. But Surer, of course, was already a rally driver. Off-duty, away from Grand Prix pressures, his leather-clothes business and teutonic car-customing garage, Surer rallies a Renault 5

Turbo. Third on the Köln-Ahrweiler Rally, he is quick and enthusiastic, with a detailed knowledge of his car, down to its tardy off-boost performance and appetite for rocker arms — Marc Surer rallies because he enjoys it. Only when his Grand Prix and sports-racing career chances are finally extinguished would he consider aiming Mikkola-high with a serious all-out world rallying effort. The truncated Quattro — to be used next by Michèle Mouton on the Lombard-RAC Rally —would present him with four-wheel-drive and 450bhp under a conglomeration of Kevlar and composites.

So Surer moved around slowly — damp mornings hurt his legs, screwed back together after two horrifying car-failure shunts — waiting for Mikkola. And then, suddenly, he was there, in the pitlane surrounded by the video men and their snaking cables. He looked slim and suntanned and very blond, but his expression was that of a child who had just been told that Christmas was cancelled this year. The Arrows mechanics had already decided he was a hero just to drive the A7 slowly, let alone attempt to set a time against Surer. The seat-fitting had been fun — *"He's just like Alan Jones,"* said one with a smile. What, packed with that kind of head-down talent, somebody asked. *"No, big in the shoulders and chest but narrow in the hips,"* grinned the wrench...



THREE LAPS OUT, SURER IS JABBING THE ARROWS SIDEWAYS ON OPPOSITE LOCK COMING OUT OF THE CHICANE.

Surer got ready to warm the car up, five laps watching the gauges, tank-tape over the radiators. Mikkola answered questions. Any previous racing experience? *"Maybe '69 I did some. Saloon races in England. Escort. I did a season, maybe 20 races."* Next to Mikkola, Surer looks tiny: the jockey and the hurdler. As the Arrows trundles along the pits, Mikkola eases in his ear plugs. He's come prepared — in all but crash helmet. The American television interviewer comes up with a prehistoric Bell full-face.

Three laps out, Surer is jabbing the Arrows sideways on opposite lock coming out of the chicane, fat rear Goodyear baby-kissing the kerb.

This is a wet tyre morning. A double echo under the Dunlop bridge makes the Bee-Emm sound angrier, harsher. Surer pits, steam fogging around the tyres. Mikkola talks to Arrows boss, Jackie Oliver, Boss-clothed, elegant, in all but blue Goodyear cap. Mikkola seems glum, concerned. Before Surer goes out to go for four timed laps, the American television man corners Mikkola with a golden larynx.

"A lot of people, Hannu, think that this is scarier to watch than to do —you're going to feel more secure when you're in the car and going around," cooed the interviewer.

"Let's hope so, let's hope so," said Mikkola looking, just for a fraction of a second, as if he would rather be somewhere else right now. *"The thing is, Hannu, to enjoy it,"* said the TVman as though Mikkola had suddenly lost all vestige of rational thought. *"Yes, yes, of course,"* said Mikkola.

And then Hannu Mikkola, the 1983 World Rally Driving Champion, became a Formula 1 driver. He took the Arrows out of the pits carefully, but he didn't stall. There are Formula 3 drivers of pimples and payments-per-race who would stutter a turbocar to a halt along the pitlane. Mikkola didn't. And his gearchanges were crisp and sharp, in the six laps it took for him to brrrrappppppp! against the rev-limiter. Presumably worried that if he didn't keep on interviewing somebody he would end up talking to himself, the American TV-person made a beeline for Jackie Oliver, standing, stopwatch-in-hand, at the pitwall. *"How does it feel to see a quarter-million dollars of your equipment being driven quickly by a first-time driver?"* he asked Oliver.

"I feel fine," came back the reply. *"I'm just waiting for him to come past the first time."*

"If he does start going quicker are you going to show him the slow-down sign or the 'easy' sign?"

"I'm sure he knows what to do," said Oliver.

"So you think he'll stay inside his parameters?" asked the interviewer with a disarming earnestness. *"Ah, yes, no problems — he's got good car control. I'm more worried about him than myself."*

Spotting the sympathy angle, the interviewer closed in: *"Cars are easier to replace."* *"That's right,"* said Oliver, clicking a stopwatch.

And Mikkola was staying inside his parameters, although that is not the way he would choose to describe the sensation. Surer's times had run 1m 13.12s, 1m 12.70s, 1m 12.46s, 1m 12.67s: Mikkola did 1m 42.93s, 1m 51.07s, 1m 33.22s, 1m 26.93s, 1m 27.95s. There were dry spots forming on the track too. Mikkola looked pinker and happier now, sitting in the car talking to Surer against the electronic cicada background of a dozen Canon motor-drives. *"I can see, the visor is getting foggy,"* he said slowly. Marc Surer began to rip up little pieces of tank-tape to gum the visor ajar. *"I'd like to do a few more laps, just to get used to it."*

Then came the critique. *"Listening to you change down — miss a gear going into the first bend. If you're in sixth, go fifth or fourth and then second. Because otherwise you change and change and change and the engine doesn't respond quickly enough."*

"I found second gear very difficult."

"Yes?"

"And I couldn't always get fourth."

"You don't push it hard enough."

"It's a fantastic experience. Really. When you put your foot down on the straight... It's not so impressive in second and third gear, but when you put it into fourth...

"... and it really flies." Surer laughed. *"It looks alright. Quite impressive. And the gears sound quite good too. Not bad."*

Five laps later, Mikkola was getting tentatively sideways out of the chicane —not yet Surer-sure, but a confident step nonetheless. His last — and best — lap was down to 1m 18.6s. *"Give him one day here and he'd really go,"* said a mechanic to no-one in particular. The pedals needed adjusting. Mikkola was too close to them, particularly the throttle. He was beginning to feel the G-loading in the corners now. And the track was much drier, for Surer, it would have been time to switch to slick tyres and push for a time. Mikkola stayed on wets.

Five more laps: 1m 17.04s, 1m 16.70s, 1m 17.27s, 1m 15.51s, 1m 15.50s: the pitlane applauded. Jackie Oliver crouched by the car in approved team-leader style. *"What do you think? You're driving very well."* Mikkola smiled that wide smile for the first time. *"Oh, it's fantastic. You know, now it's giving me the warnings. When you're not on full throttle you can handle it, but when you're on full throttle I think it's so quick you might have a problem."*

"How does it compare to your rally car?" questioned Oliver. *"OK, first and second gears it goes faster, but not so much. But when you get to fourth, fifth and sixth it's just fantas-*

tic." Braking? *"Braking is just fantastic. I was leaving it a little bit later and later, but still I'm braking much too soon. Also I'm very much afraid that when I'm braking too late it's locking up."* Pause. *"It's good fun. A good feeling."* You look a lot happier now, Hannu. *"I thought it would be much more difficult — it looks so much more difficult...."*

"At first I was impressed by the wheels going around ahead of me. But immediately I could feel that it responds to steering, and that it stops very quickly. The most difficult thing was to find the gears in the beginning, because second gear is very difficult to get in.

Then I tried to get an idea of when it starts to spin the wheels and when it starts to slide, and see if I was quick enough to correct it — I was. It's a very long wheelbase car, so it gives you a good warning when it starts to slide. The track being wet didn't make it any easier — because I was trying to find out how it was handling. I would have prefered a dry track to see if it is handling normally — that was not so good..."

"On a one-kilometre stage, the difference between knowing and not knowing the course is one second. That's all." With that affirmation of rally driving talent, Mikkola went off to practice in the Audi Sport Quattro on Donington's special stage, deep in the woods by the Melbourne testing loop. Surer had done his warm-up — and praised Mikkola's F1 driving. *"Very good — but I went around at the end, and the track was dry, it was maybe five seconds quicker than when I set my time."* The Quattro bucked past, a deranged sit-up-and-beg silhouette with a race-car growl. Again, it was best-of-five to placate the armchair experts scanning the tube at home. Revs sizzling, Mikkola dropped the clutch — and the Quattro's Michelins bit hard into squidgy Derbyshire mud. If one word could describe Mikkola's technique, that word would be fluid. At the end of the lap, the course came off the dirt onto wet tarmac and back on to ooze in a fast 180° turn. Mikkola would come in tight, with just a shade of understeer, and pump at the steering wheel continuously, front wheels dancing left, right and centre as the car slid in a perfect four-wheel-(drive)-drift —and his foot never lifted. All the correction needed came from his hands, to temper entry and exit speed, tighten line and keep speed up. Brake lights didn't blink and the right foot remained mashed into the pedal. Marc Surer shook his head in amazement. Mikkola's quickest lap was his second - 51.18s. That was the run where he got the tightest right-hander absolutely centimetre-prefect.

Marc Surer knew that Hannu Mikkola was left-foot-braking, feet hovering over the two pedals as he fired the clutch with the handswitch on the gearknob. Surer couldn't handle that radical change in style on such short notice: *"I've tried it, but I'd probably forget the throttle or something..."* So he drove conventionally, complete with a third-pedal clutch operation.

MIKKOLA'S DRIVING HAD BEEN SMOOTH AND PRECISE, SURER WAS RAGGED AND DETERMINED.

Jackie Oliver was getting into rallying and the talents of Hannu Mikkola. *"You're always on the boost pop-off valve — bang-bang-bang."* *"Yes,"* sighed Mikkola. *"That's the problem with our engine — the power band is so narrow. We are working on it..."* With that, Surer took off. His run was brave. Coming into the critical turn, he would come in on full understeer, chomping off the dirt, back off, get the Quattro to oversteer and then fishtail back through the trees. This was gut-reaction-driving, where Mikkola had been smooth and precise and looking as if he was shaving tenths of a second off a target time that existed only in his head, Surer was ragged and determined to see if willpower and reflex would match left-foot braking.

It didn't. On his penultimate run — of seven he finally sneaked it: — Surer cut a 52.52s best. He looked shattered by the physical demands of fighting a short German. *"Sometimes, in the Quattro, I don't know where the steering wheel is pointing. You don't feel the front that well. So, sometimes there is opposite lock and sometimes it's the other way. But the traction is unbelievable. You can accelerate hard — and there's a lot of power — and it just goes. Lag is about the same as my Renault 5 Turbo rally car. Under 5000 rpm there is not much, but the powerband is around 5000 rpm to 8000 rpm, whereas my Renault runs from 4500 rpm to 7000 rpm."*

"But, definitely, to drive this car properly, you need to left-foot-brake. Because when I go on the brakes to turn in, I lose the boost — and it understeers. In the tight parts, it just wouldn't turn in. Nothing you can do. In the fast bits it's nice, doesn't matter if it's understeer or oversteer, but as soon as the road tightens it gets very difficult." *"That's a hard thing to change, that bit of a technique in such a short time,"* mumbled TVman. *"It takes more than a few laps, that's for sure,"* commiserated a croakily-voiced Mikkola.

Surer was running late for his flight to Düsseldorf, and Mikkola wanted to head back to bed. TVman wanted to call the whole thing a draw, and Surer wished the Finnish television-watching public a Happy New Year in his phonetic interpretation of their complex tongue. The two men shook hands. Would Surer like to do more rallying? Yes, he would — and maybe Peugeot Switzerland would be able to afford an Ari Vatanen-clone Peugeot 205 Turbo 16 for him to use. And Mikkola? Would he like to take up Formula 1? *"I'll have to ask Jackie Oliver. It's time somebody from Finland gave Keke Rosberg a hard time...!"* Even TVman cracked a smile for that one.

"When you get up the right revs it really pulls. First and second gear are so short, but it didn't impress me that much. But when you go to fourth, fifth and sixth then it just goes, like that. I felt quite confident even though I was increasing the speed. The only difficulty was to keep the power in the bend: if you give it a little bit too much it is immediately sideways. So you have to be very careful there and drive nicely, smoothly and stay away from the kerbs.

I don't know too much about Formula 1 after doing only 15 laps or so. Like every sport — rallying or Formula 1 —the last two or three seconds per lap are the difficult ones and you have to fight very hard to get them. But, basically, the feeling of the car, the gearchange, the steering, the engine — it's not so difficult to come from a rally car to that. The car responds in a similar way.

I think we have more turbo-lag than they have. Because on the circuit you can select a gear which is right for each bend, and that reduces the lag. The lag is only really there if you make a mistake and you find yourself in the wrong gear. But in rallying, not always knowing what is ahead of you, you can go into a bend in the wrong gear and it's much more difficult to sort it out.

I think having the clutch operated from the gearlever like we do in the Quattro might be a good idea for Formula 1. I still would like to try left-foot-braking. But after 15 laps, I'm not sure enough of what the car might do. And you spend so little time in one gear...." ■

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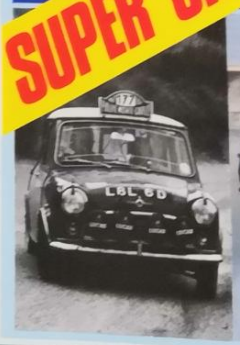

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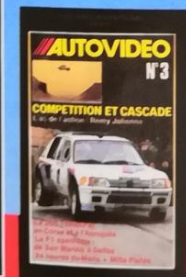

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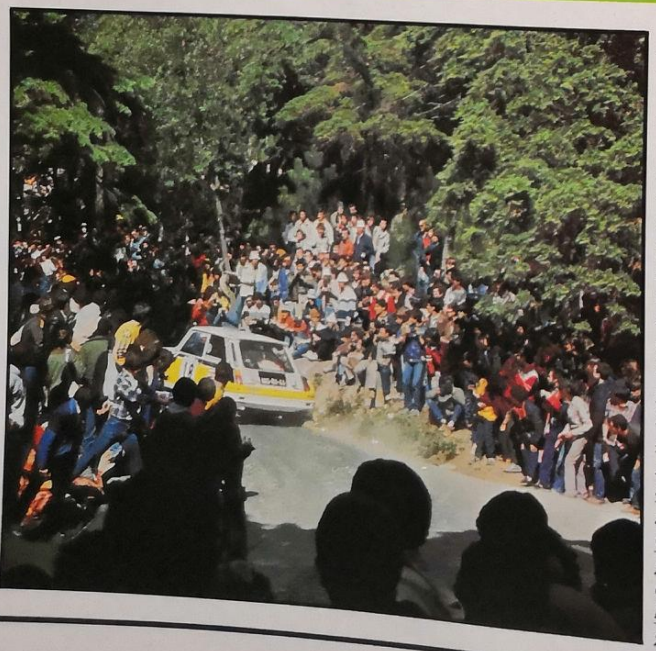
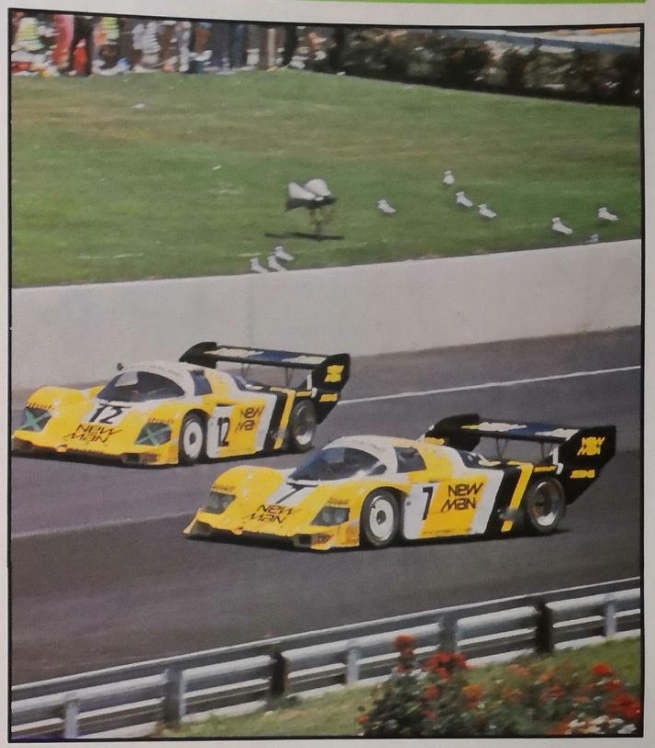
23rd: Detroit (USA)
JULY
7th: France (Paul Ricard)
21st : Great Britain (Silverstone)
AUGUST
4th: Germany (Nürburgring or Hockenheim)
18th: Austria: (Zeltweg)
25th: Holland (Zandvoort)
SEPTEMBER
8th: Italy (Monza)
22nd: New York
OCTOBER
13th: Europe (Rome)
26th: South Africa (Kyalami)
NOVEMBER
3rd: Australia (Adelaide)

RALLIES



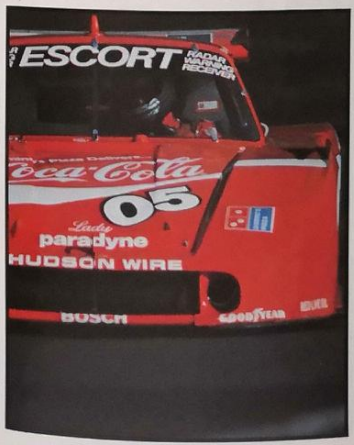
JANUARY
26th/2nd February: Monte Carlo
FEBRUARY
15th/17th: Sweden
MARCH
5th/10th: Portugal
APRIL
4th/8th: Safari (EAK)
MAY
4th/6th: Tour of Corsica (F)
25th/31st: Acropolis (GR)
JUNE
27th/3rd July: New Zealand
JULY
27th/3rd August: Argentina
AUGUST
21st/25th: 1000 Lakes (SF)
SEPTEMBER
30th/5th October: San Remo (I)
OCTOBER
29th/3rd November: Ivory Coast (*)
NOVEMBER
23rd/28th: RAC (GB)

ENDURANCE



APRIL
14th: Mugello (Italy)
28th: Monza (Italy)
MAY
12th: Silverstone (Great Britain)
JUNE
15th/16th: Le Mans 24 Hours (France)
JULY
14th: Hockenheim (Germany)
AUGUST
11th: Mosport (Canada)
SEPTEMBER
1st: Spa-Francorchamps (Belgium)
15th: Brands Hatch (*) (Great Britain)
OCTOBER
6th: Mount Fuji (Japan)
NOVEMBER
3rd: Sandown Park (Australia)

OTHER RACES

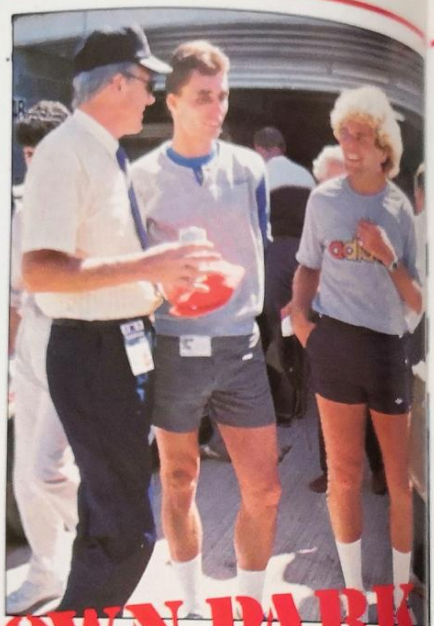


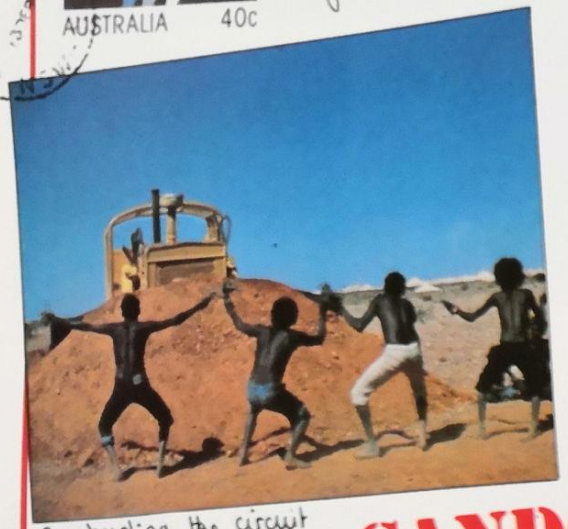
FEBRUARY
2nd/3rd: Daytona 24 Hours (IMSA)
MARCH
23rd: Sebring 12 Hours (IMSA)
31st: Riverside (Transam)
APRIL
14th: Road Atlanta (IMSA)
28th: Riverside (IMSA)
MAY
5th: Laguna Seca (IMSA)
11th/12th: Indianapolis Qualifying (USAC)
18th/19th: Indianapolis Qualifying (USAC)
26th: Indianapolis 500 (USAC)
27th: Lime Rock (IMSA)
JUNE
23rd: Mid Ohio (IMSA)
JULY
7th: Watkins Glen (IMSA)
14th: Michigan Speedway (IMSA)
28th: Portland (IMSA)
AUGUST
4th: Sears Point (IMSA)
25th: Road America (IMSA)
SEPTEMBER
1st: Trois Rivières (Canam + Transam)
8th: Mosport (Canam + Transam)
29th: Watkins Glen (IMSA)
NOVEMBER
24th: Kyalami (IMSA)
DECEMBER
1st: Daytona Speedway (IMSA)

(*) Drivers' championship round only.

AUSTRALIA 40c

famous sportsmen...



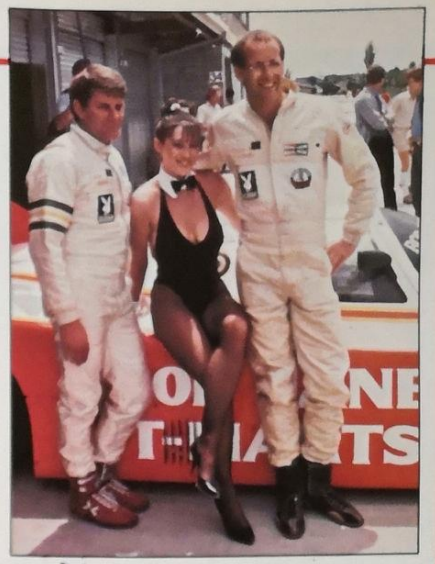


Constructing the circuit

SANDOWN PARK

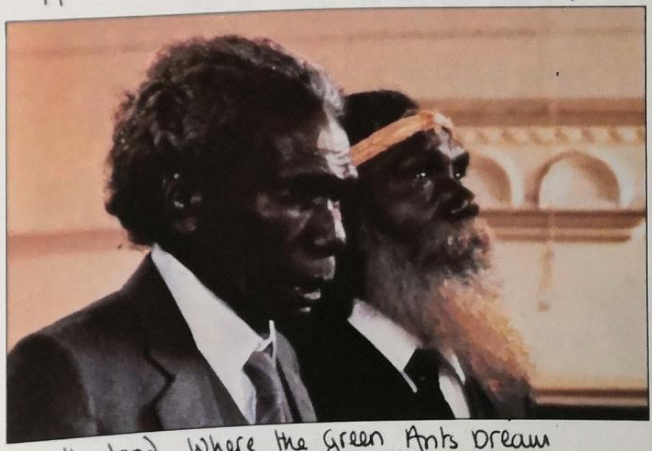
a few local beauties...

Everything's ready - the 'choppers



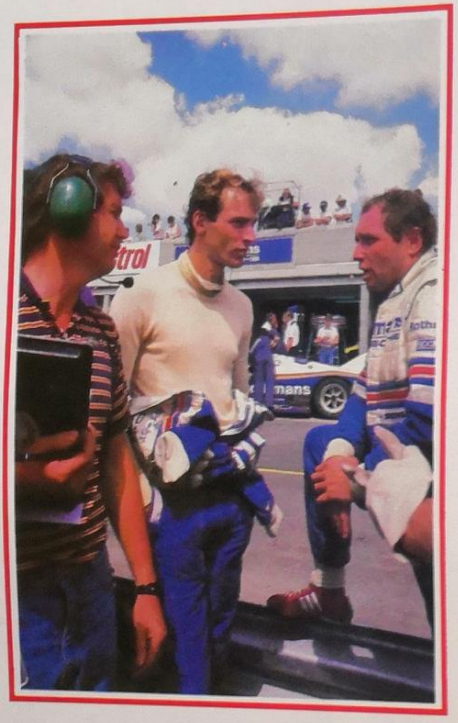
the drivers

the planes



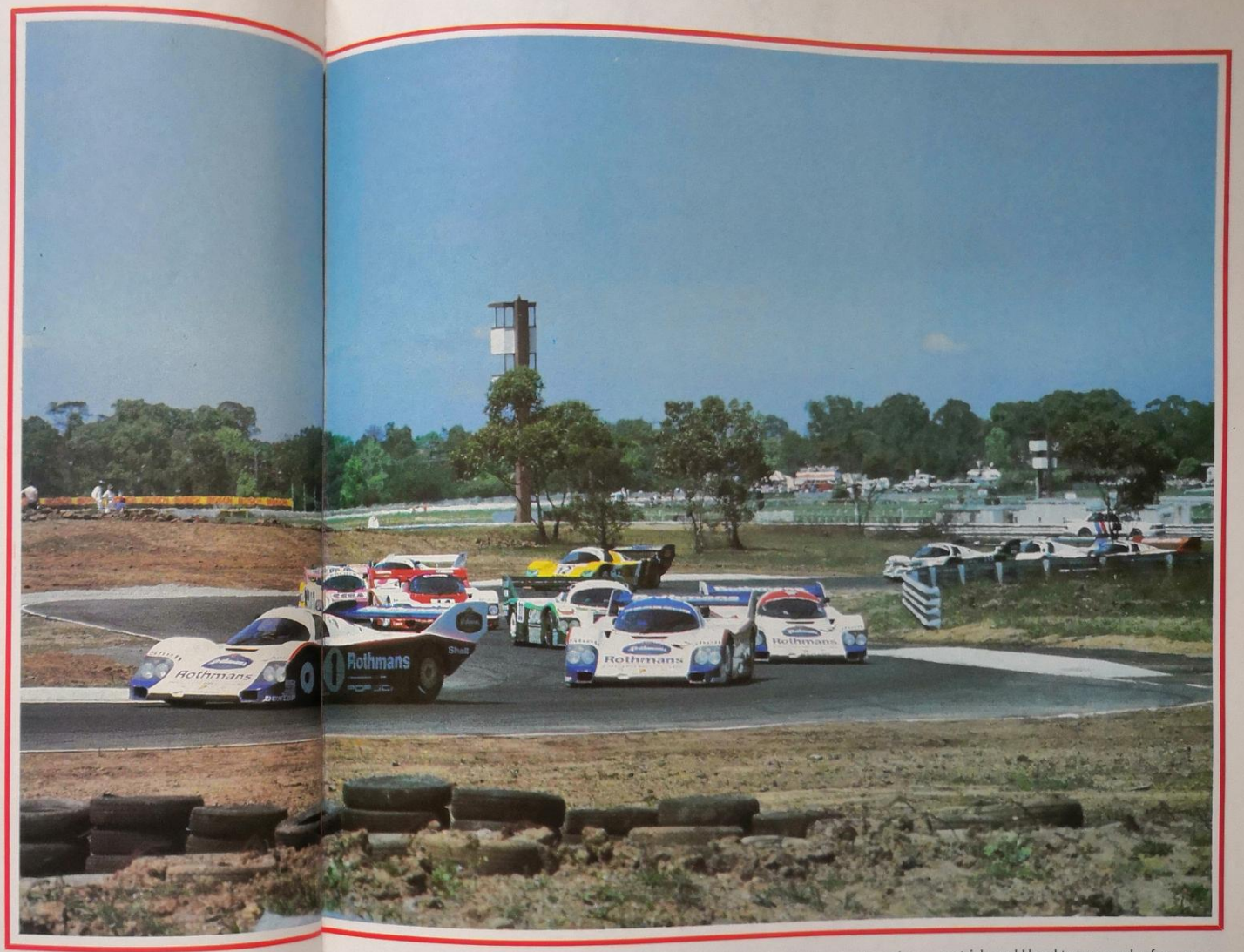
in the land where the green Ants Dream

BELLOF



THE MAN WITH EVERYTHING GOING FOR HIM

THE BELL/BELLOF TANDEM HAD A FINE END TO A FINE SEASON IN THE WEC. THE NEW GERMAN-BRED KING OF ENDURANCE HAD MORE LUCK THAN HIS CLOSEST RIVAL FOR THE CROWN, JOCHEN MASS —WHO AFTER MORE THAN TWENTY YEARS OF LOYAL AND FAITHFUL SERVICE, MAY NOT GET ANOTHER CHANCE OF WINNING A TITLE. BELLOF'S CAREER IS OFF TO A MORE THAN PROMISING START.



The small world of Endurance was all excited at the thought of going to Australia and into unfamiliar territory. They packed up their bags and boarded their plane at the end of November, all set for the 26-hour journey to Aussie land. The journey is a hard slog and I, for one, wasn't quite expecting that. On the way over, daylight prevails most of the time, you leave on a Monday and arrive on a Wednesday. On the way back, you leave on a Tuesday afternoon which brings you back to Europe at the crack of dawn on Wednesday — having spent over eighteen hours watching the stars! It doesn't matter how many exciting and interesting magazines you buy before you board the plane, you'll get through the lot before touch-down. The Porsche Group Cs had an easier time getting through customs and quaranteen inspection than most

present at Sandown Park, you could be forgiven for thinking you were at Silverstone. But the climate and vegetation soon brought you back to reality.
The advertising campaign for the event read; *"Le Mans comes to Australia"*. Posters had been stuck up all over the capital of the state of Victoria. For the Australians, Group C racing is synonymous of Le Mans. Last June, the Australian drivers, Brock, Perkins, Grice, Schuppan, Jones and Rusty French made the trip over to the most famous Endurance race in the world. Endurance also brings to mind the flat-out-in-fifth Hunaudières straight and local papers quoted top speeds of up to 250 mph for the French circuit! Racing fans in Australia are more familiar with the names of the Le Mans track, than those of the Bathurst or Surfer's Paradise circuits.
Sandown Park is situated on a race course about 18 miles south east of Melbourne. Getting to the circuit can be a costly business for those who make the trip over — the car-hire rates are about £60 a day! Most of us made our way to the circuit in small groups. Our first surprise came at the parc fermé where a number of vintage cars could be admired. Planned to race between two practice sessions on Saturday morning were a Mini Cooper, a Ford Mustang, a Jaguar MK 11 and two post-war Holdens and an old Peugeot 203 — which unfortunately failed to qualify. As for the Group Cs, there was nothing really new or exciting to talk about. Australia is definitely not Japan when it comes to Group C racing! With a limited home market and no real nearby export potential, the local automobile industry tends to be made up of multi-national companies like Ford, General Motors, Mazda or Honda. Porsche was represented by the Joest, Kremer, Fitzpatrick and Lloyd teams and, of course, the factory cars.
This first-ever round on the Australian continent was more for the spectators than for the European specialists themselves who had no real doubts of what the final outcome was going to be.

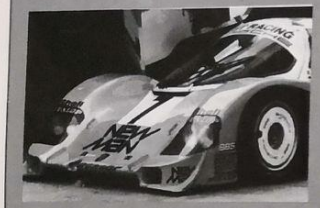
PRACTICE: BELLOF TAKES CHARGE

Stefan Bellof demolished the whole of the rear of his 956 after only two or three laps on Saturday morning, which left him rather worried as to whether he was going to be able to clinch the WEC title, seemingly destined to be his since his performances at Imola, Spa and Fuji. *"The tyres hadn't warmed up to the right temperature and I was a little off line, it's nothing really"*, he was heard repeating as more and more people

Unlike the Japanese at Mount Fuji, there were no local Australian Group C projects as such. As for the European teams that had made the trip over, there were no real modifications worth talking about.

PORSCHE

All the Porsches — including Schornstein's — were fitted with a more streamlined front cover. The main difference between the various entries was a question of choice of rubber. The Joest and Fitzpatrick teams were on Good Year and the rest of the squad had opted for Dunlop. Boutsen tried some new Yokohama tyres for Fitz during practice. The chassis were allocated as follows: 010 for No 1, 009 for No 2, 004 for No 3 and 007 for No 56, a car which Rothmans had in fact bought. The private entries were entered as follows: chassis 101 for No 11, 115 for No 10, 0068 for the Canon, 114 for No 33, the 962/105 chassis for No 34 and he 104 and 105 chassis for the Joest contingent.



CHEVROLET MONZA

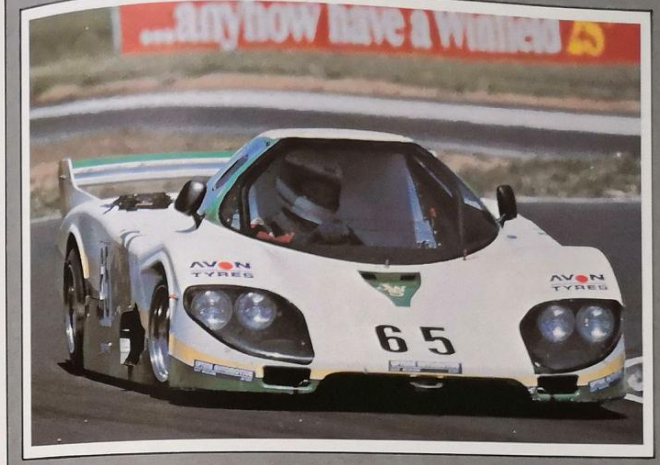
The pride and joy of Australia. This car, the only one of its kind, was built in 1978 for Bob Jane, and is the best performing local car, it clinched the '84 GT Sport Sedan title. It has since been bought by a rich businessman from Melbourne, Alan Browne. The chassis has been rebuilt by a certain Lee Small and his friend, Pat Purcell has taken good care of the V8 6-litre engine. One of the three drivers, Ron Harrop, was in charge of developing the new suspension, especially designed to meet Endurance racing requirements. The car weighs 970 kilos and was raced in September at Sandown Park where its fastest time was recorded in 1m 41.6s.

MERCEDES-CHEVROLET

The European journalists had come to admire this rather exotic concoction. It was made up of a 350 SLC shell over a tubular chassis, which had been so designed to take almost any kind of power block. The constructor, Peter Fowler, decided to fit the 4.2-litre V8 Chevrolet engine. He was the first to admit that he had chosen the carbon fibre shell arbitrarily. *"I noticed that other teams were basing their cars on top-of-the-range models like Porsche, Chevrolet or BMW, I thought we might as well try a 350 SLC as my boss works for Mercedes."* The outstanding feature on the car is the twin Garrett turbos which ensure between at least 700 bhp and 900 bhp (!) when necessary. Transmission is through an LG 600 Hewland gearbox, (a four-speed Wiseman on the Monza) needed to cope with the 1,166 kilos. Since its construction in 1980, the car has been steadily growing in size. It started out in Group 2 and now the German ex-group 5 participants cast a jealous eye on it. The engine, however, is situated almost in place of the passenger's seat, causing overheating problems in the cockpit for the driver. 16" wheels have been fitted to the front and 19" to the rear. The car came third in both the 1983 and 1984 Australian championships, but it should be remembered that the races only last 20 laps. Water radiators have been fitted behind each of the front wheels in a bid to cool the engine. The oil radiator is placed in front of the rear wheel. The actual cost of building the machine is estimated at 80,000 Australian dollars and the mastermind behind its creation flies the red, black and white colours of its sponsors, the Australian Road Transport Team and those of Bryan Thomson, one of the drivers.

ROMANO-FORD

The Romano-Ford looked like a Group C, or rather a reconverted Can-Am. Anyway, it didn't look at all out of place amongst the real European Endurance cars. The car was born a Kaditcha four years ago. The owner had it completely revised for the 1000 km, having just won this year's national championship. As the car weighed in at only 770 kilos, 80 kilos of ballast had to be added. A 3.9-litre Cosworth power block has been fitted, but a simple DFL could also have been. There is an aluminium monocoque chassis and the bodywork is constructed out of fibre glass. Bap (Baptiste) Romano and his mate, Alf Costanzo — a national hero in the world of racing down under — modified the front section — which in fact comes from a Tyrrell F1 (!). As usual in this business, time ran short, and Romano realised after the testing at Calder (the other Melbourne circuit) that the modifications had not improved the cars performance figures — quite the opposite in fact, as the car was down four seconds on its usual times — most regretable as over $100,000 had been invested in the project. Construction took place at Brisbane. The car was equipped with 13" Avon tyres to the front and 15" ones to the rear.

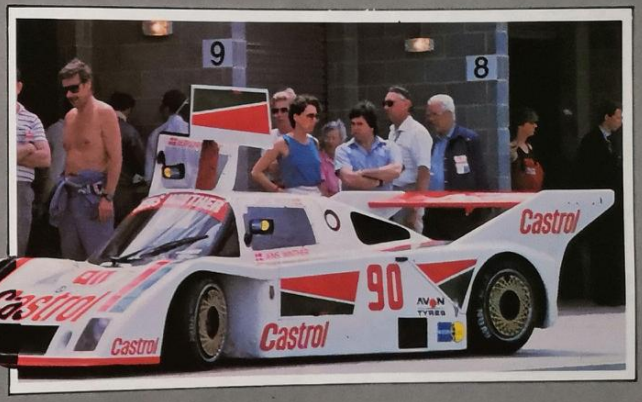


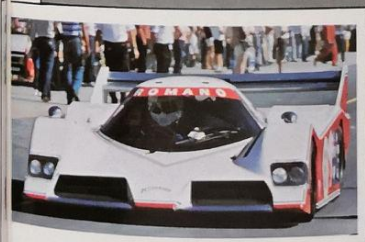
JWS-MAZDA

The initials stand for John Wright Special, the car's constructor, based in New South Wales. There is an aluminium monocoque chassis and the engine is fitted to a tubular cradle. The engine has a single carburettor which has the engine developing only 285 bhp for 630 kilos. Two oil radiators have been fitted to the rear wing and a water radiator is placed to the right. The bodywork is the work of Reginald Gibbs, a business man engaged until recently in the manufacturing of fibre glass boats and WCs (!). Despite his lack of experience, the work is absolutely superb and the car is exquisitely streamlined. The car was built in just twelve weeks, especially for the 1000 km. John Wright has high hopes of obtaining a turbo engine for next season so that he will be able to rival with the Group Cs. This year, he was unable to compete in that category as he didn't have a FISA technical passport!! The suspension unit comes from a Ralt and a Hewland FT 200 gearbox has been fitted. There are 13" Avon tyres on both the front and the rear wheels.

URD-BWM

Danish drivers, Lars Viggo and Jens Winther clinched the Group B FIA Trophy for BMW. For the Australian round they offered themselves the luxury of a URD chassis for their M1 engine. Their car is already famous in the world of journalism. They bought it from Harald Grohs who got the first braking completely wrong at the first turn of the 1983 Nürburgring 1000 km, sending him right into the middle of the photographers. The main noticeable difference was the colour of the car. It was painted in the colours of its backer, Castrol. The new owners have the firm intention of stripping the entire car during the winter to prepare it for the European championship next year.





BMW 320

The Australian Sedan GT Car Championship was reserved for Group 5 style cars, so it came as no surprise to find a BMW 320 belonging to Jim Richards and Tony Longhurst. Its peculiarity was that it had come over from the States as Jim Busby used to race it over there when he was the Bavarian works driver about five years ago. The 1988cc F2 engine produces 300 bhp and is prepared by Frank Gardner, a familiar figure in the world of Endurance racing. The car was on Yokohama tyres and was superbly decorated in JPS livery. Yokohama rubber was fitted to the Lola T600 too, driven by the American pair, Cook and Kendall. There were also three Gebhardts, one of which (No 73), now belongs to Britisher Ian Harrower. The second Cosworth-engined 843 has just been completed and will be used by the Gebhardt brothers during 1985 for their '85 world campaign.

came to see him when they'd heard of the incident. Given the design of the circuit, we had in fact been expecting a lot more accidents, but Bellof was the only one to damage his car. The Chevrolet Monza clanged into the guard rails quite a few times but suffered no damage. The 956 called into the pits and left the track free for its rivals. Thierry Boutsen made the best use of the incident, testing both Yokohama and Good Year tyres to determine just how much progress had been made by the Japanese manufacturer, with whom Fitz has a contract. The Belgian driver put in the fastest qualifying time (1m 32.41s) until Mass decided it was about time to show that he too was a contender for first place. A time of 1m 32.9s put him ahead of Boutsen, Ludwig, Palmer, Winkelhock... However, the mechanics had completed repairing the damage on Bellof's car — it had taken them all of eleven hours. The German driver was ready to give a demonstration of his talents. A lap in 1m 31.6s was enough to put a smile back on his face and team mate, Derek Bell, looked relieved.

Meanwhile, Peter Falk was worrying about the jammed gearbox on the No 3 Porsche driven by Schuppan/Jones. The Australian pair had put in a time of only

Miedecke/Colin Bond were backed by Playboy Australia!

Yvan Lendl came to have a look round at Sandown.

The best-placed private Porsche was 3rd, despite no less than twelve punctures!

News from down under

The Australians have many weekend activities to choose from at this particular time of the year. Their rugby team is busy teaching their English and Welsh ancestors a lesson or two, and politics is a hot point since the election campaigns for the House of Lords and the House of Commons are in full swing. The Labour party won again at the elections held on December 2nd, but by a narrower margin than before.

Fitzpatrick, the globe trotter, has had enough of sunny California and has moved over to Europe and Marbella in Spain. For engine preparation, the Silverstone address is still the one to use.

1985 projects are more than a little vague — Skoal Bandit have only agreed to backing one car, but no contracts have been signed as yet, the Anglo-American-Spanish constructor is quite optimistic however.

Jan Lammers was the man that all the journalists were after at Sandown. Are the rumours of his signing on with Lancia for the 1985 season true or false? Lammers was giving nothing away, and with the slightest of smirks he pointed out that a phone call to his home was worth 100 times more than the newsmongery bandied about in specialised Italian magazines.

Henri Pescarolo was finally the man to take the 1984 Porsche Trophy home with him although a number of people at Porsche would have preferred Al Holbert. The group's public relations directors would have been able to exploit an American driver's image better, but the points have won...

Porsche sponsor other sporting activities outside the world of motor racing and take a keen interest in tennis. Lendl and Navratilova sport their colours at various tournaments. As the Australian Internationals were taking place at the same time, Ivan Lendl dropped by and visited the stands on Saturday.

In respect of the importance of the Sandown 1000 km, the state of Victoria held a *"formal"* yet *"relaxed"* reception for all competing European drivers at the Melbourne round. They were interviewed by local journalists.

Moët and Chandon also held a cocktail party with memorable consequences for some... Dominique Piedade, the Joest Racing team manager was slightly under the effect of all those little sparkling bubbles and, as he began manœuvering his car to drive away, he caused quite a bit of damage on his boss's car as he banged his way to and fro. The damage incurred included: two torn-off bumpers, two damaged wngs and a number of smashed lights. The local inhabitants spotted him sneaking off incognito and they took down his number plate and reported the incident to Joest, adding that as a result of their quick thinking, he could report the incident to the police...

Sarel Van der Merwe will be renewing his contract with Kreepy Krauly to take part in the 1985 IMSA championship. His calendar will be very similar to 1984's since, apart from driving a March-Porsche on the American continent, the South African driver will be coming over to Europe to take part in the Le Mans 24 Hours as well as a few other rounds of the WEC with perhaps a few rallies here and there when he has a little free time.

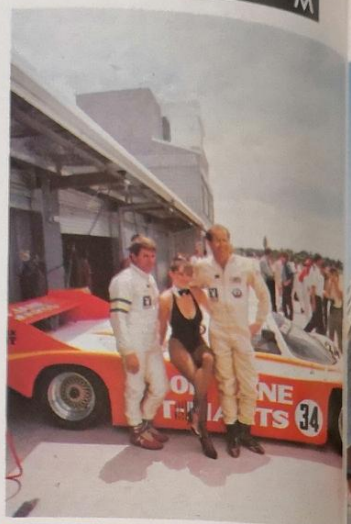
This year's Sandown 1000 km coincided with the international tennis tournament and next year's date has been moved forward to November 10th. This is not exactly a wise choice on the organisers' behalf, since the most prestigious local horse race, the Melbourne Cup, is also being held at that time. Spectators and participants will have a hard time finding a vacant hotel room for less than 100 Australian dollars — approximately £80...

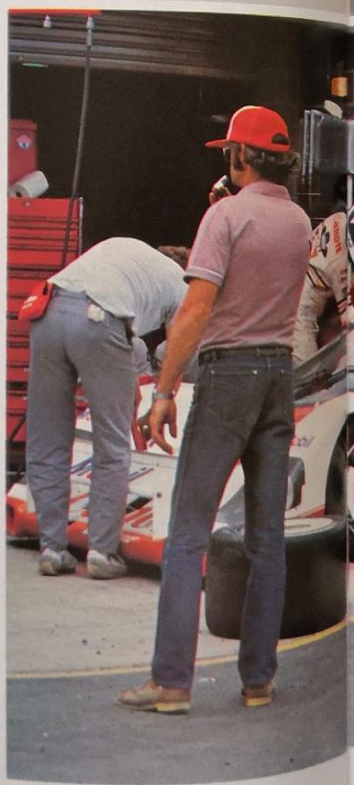
It was being rumoured around Sandown Park that Renault had placed an order with a specialised manufacturer for a fuel tank to comply with Group C regulations.

Rondeau and Cougar are both busy preparing their respective '85 seasons. They have both opted to feature Porsche engines on their latest creations.

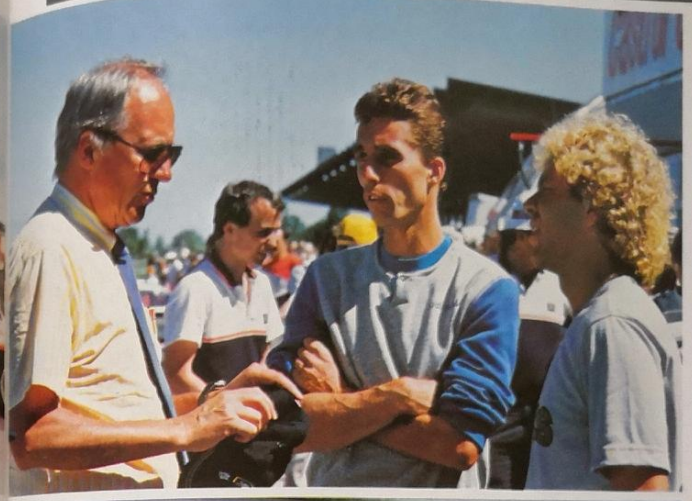
The Porsche factory is certainly making hay while the sun shines — they are building two new 962s for the Kremer brothers and Walter Brun.

Walter Brun was recently released on bail from jail in Switzerland after denying charges that he had been acting as a pimp. The central figure in the Swiss affair, Harald Grohs, is still behind bars.





1m 32.24s which did absolutely no justice to their driving skills and if anyone was going to improve on their times on Monday afternoon, it was going to be them. For publicity reasons, they had no choice really, but a certain amount of pride was at stake too. Although things were going relatively smoothly for the Porsche 956 brigade, the Australian GT category realised almost immediately



just how far behind they were, compared to the best European Group Cs. The fastest local driver of the category was Romano in 1m 38.4s. The Monza didn't manage to get below the 1m 40s barrier and the Mercedes Chevrolet could only manage 1m 47.1s (slower than the BMW 320, which put in a time of 1m 44.4s).

Gordon Spice and Neil Crang — racing at home for once — outdid the Albas again in the C2 category. The Gebhardts were quite a way further back.

The Porsche factory quickly achieved its first target at the beginning of the second practice session when Vern Schuppan put in 1m 32.4s, just two tenths of a second less than the best privateer, Boutsen. Other improvements concerned mainly the C2s, which on the whole managed quite well in light of the fact that most of the drivers were discovering their cars and the circuit for the first time. Two of the three Gebhardts improved on their times as did the URD. The JWS-Mazda even managed a time of 1m 46.6s, faster than the massive Mercedes which spent more time in the pits than out on the track. John Bartlett's Lola T610 didn't get below 1m 54s — even the BMW was quicker! Two of the three drivers weren't fast enough to qualify, but were allowed to start because they had come so far!!!

For the first time since we had arrived, the weather was absolutely terrific — but that proved to be more of a handicap for the organisers than anything else, as potential spectators were tempted to the beaches nearby.

Motor sport in Australia

The Australian motor sport body is organised like any other country's and governed by FISA rules and regulations. The Confederation of Australian Motor Sport (CAMS) is an umbrella group for a number of organising clubs. The Aussies enjoy their motor sport, just as we do, and circuit racing tops the list, followed by rallying, hill-climbing, sprints and autotests. The most well-known circuit races held in Australia include the former Tasmanian series and Formula Pacific. Various national Touring Car championships are also held and they will be based on Group A FISA regulations for the 1985 season. Other championships are organised for the Sports Sedan GT (IMSA or European ex-group 5 style), F2 (1600cc) and Formula Ford (1600cc) groups. There are thirteen circuits to choose from.

Victoria: Sandown, Calder and Winton.
New South Wales: Oran Park, Amaroo and Bathurst (public roads, closed-off on race days).
Queensland: Lakeside and Surfer's Paradise.
South Australia: Adelaide and Mallala.
Western Australia: Wanneroo.
Tasmania: Baskerville and Symmons Plains.

Motor sport down under is just as active as over here — why not make the trip over and find out!

THE RACE

IT WASN'T JUST MASS'S DAY

Sunday dawned bright and clear for the warm-up which began at 09:15. It was the first time that all the cars would be out on the track at the same time and we were going to be able to see just how safe the circuit was. It was not long before Miedecke and Fouché came limping home with both their front ends a mangled mess. A little later, the Monza spun and the driver was apparently more than a little surprised to find himself in the middle of a group of five cars! Back at the Mercedes pits, there was a lot of running around going on. Cooling problems had made the Mercedes a non-starter. A shame for the spectators

but no great loss for the race itself. For the race-start, the photographers were grouped at the first bend in the belief that, if there were to be any incidents, it would be there. At 11:30, they were all set, motor drives at the ready... Needless to say, it all happened at the other end of the circuit. During the warm-up lap preceding the race, the one and only Porsche 911 had lost all its engine oil on the last turn before the pit straight. Despite the warning flags, Jochen Mass was caught out and spun, upsetting the order of the pack considerably and the cars were quite spread out by the time they got to the waiting photographers. Schuppan took advantage of the situation and went into the lead ahead of Bellof, Boutsen, Winkelhock, Palmer, Ludwig, Van der Merwe, "Winter" and Keegan. The pack had already been out-distanced and was being led by Cook in the Lola, with Mass in hot pursuit of the leaders in 16th position at the end of the first lap. At that point, two types of race were possible. Either the championship had already been decided or, what we had just witnessed was a foretaste of what was to be a completely crazy race to the finish line. After ten laps, there was still hope for a little excitement, as the leaders settled down and Mass tried to make up for lost time. twelfth at the end of the second lap, Mass moved up to ninth, a lap later he was definitely working his way up through the field, but he wasn't gaining on Bellof — who couldn't believe his luck at his turn of events. The leader had started overtaking the laggers, and by lap 12 Bellof had lapped "Winter's" Porsche.

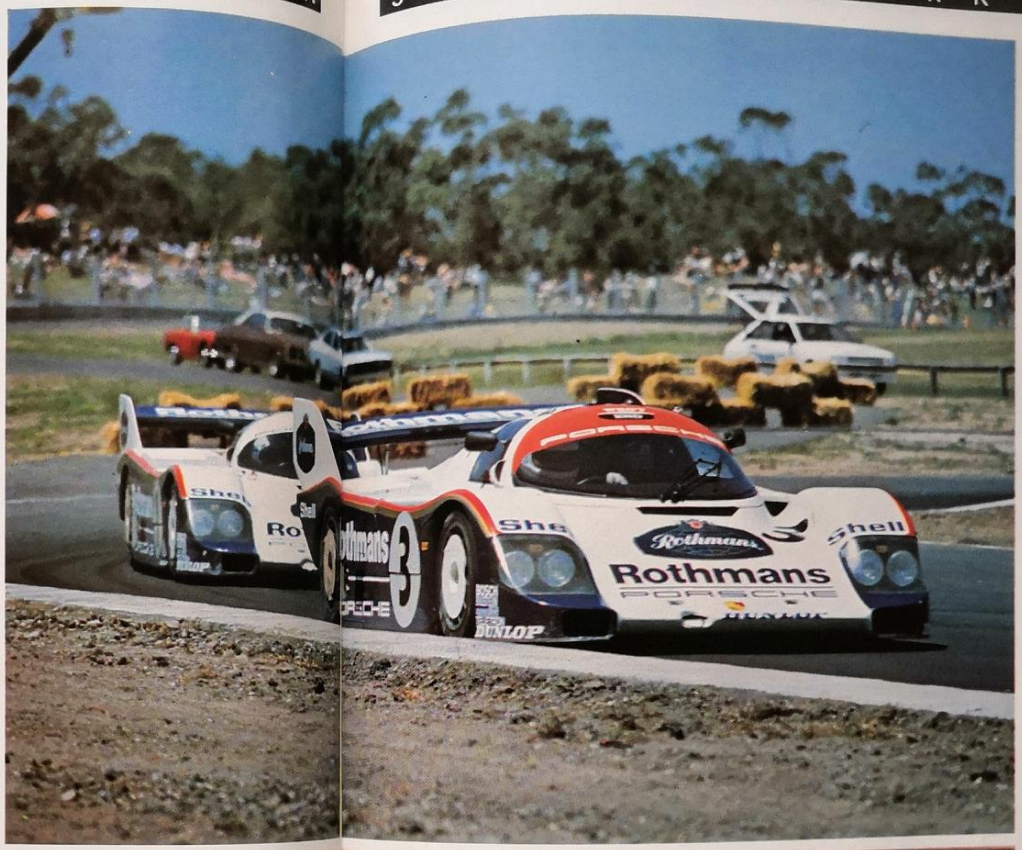
In other words, after just twelve laps, only eleven cars were on the same lap. Boutsen had nipped in to take second place in front of Schuppan and Palmer.

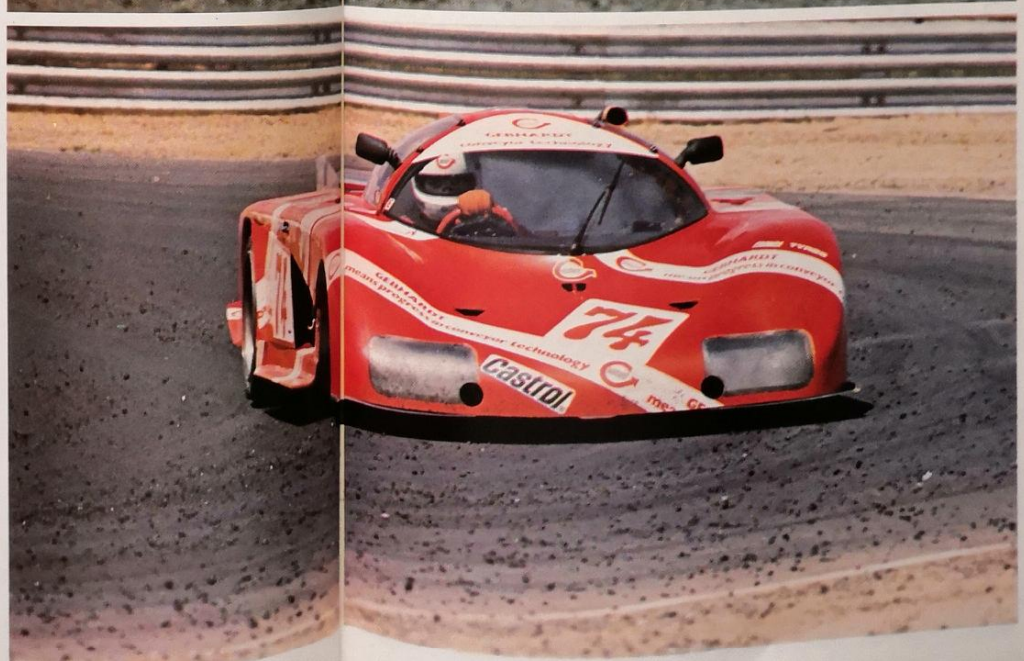
A more English club you couldn't find...

Being over 10,000 miles from home for the first time can be rather daunting if you haven't some kind of accommodation fixed up in advance. I was more than relieved when I learnt that I could count on a warm welcome at 46 Queen's Road, heaquarters of the Light Car Club of Australia, organisers of the 1000 km at Sandown Park. Much to my astonishment, the taxi dropped me off in front of a small house squeezed between a golf course on one side and a cricket pitch on the other. I needed no-one to tell me that this was the LCCA. As you go through the door, you feel as though you're walking into some house in London or Brighton, what with the thick carpet, the cups and trophies adorning the shelves and cupboard tops and the impressive display of club shirts and ties. The club's coat of arms is in full view and the prize piece must surely be the large oak board upon which all the former presidents' names have been engraved in gold lettering for posterity. There's no mistaking the British influence. There's a bar, a restaurant, a billiards room and a meeting room where films are shown regularly. You can even wash, shave or get your hair cut. Everything has been thought of for the members — they just forgot the dart board! David Dardy, the race promoter, estimates that membership costs $70 (£55) a year. Additionally, you get free admission to all events organised by the club. The Light Car Club is the biggest of its kind on the whole of the Australian continent, but there are only 2,000 members. So, how on earth do they manage to put together a WEC round? *"It costs us two free air tickets for each car entered. Then we have to bear the cost of transporting the material firstly from Japan, and then after the race it has to be sent back to Europe. Roughly, it costs $400,000 (£320,000). About a quarter of the amount was obtained through sponsors such as Winfield, Castrol, Mobil, Ford, Hertz or Quantas. The rest will have to be made up by the spectators,"* David Hardy explained on the Friday preceeding the race. *"If we sell twenty thousand admission tickets, we will not only have broken even, but we will have made the whole event profitable."*

Unfortunately, only 15,000 people came to the show, which came as a nasty surprise. Perhaps membership fees will be going up next year, unless the club have reserves tucked away! Various explanations were given as to why the race didn't attract as many spectators as hoped. Some say there wasn't enough advertising on television, others that the publicity value of the presence of seven Australian drivers at the Le Mans '84 had been overestimated with regards the local population. Another factorwas the hot weather and the proximity of the beaches or perhaps the international tennis tournament. Five people had been employed full time on the project and there were over four hundred volunteers, and they couldn't pinpoint the reason for the failure. According to David Hardy, *"The public enjoy Group C racing, and saloon cars have always brought in larger crowds than single seater races. No-one round here understands anything any more. The other day, a new cricket ground was opened, and only 18,000 people turned up. They had been expecting 80,000 people to come as admission to the inaugurating test-match was free! The elections didn't help much either, as they took up a great deal of the TV time we would have used. We'll have to wait and see what happens in 1985."*

It is nevertheless a great pity for the LCCA and for Australia. The Melbourne race was the first serious official international race since the Tasmanian series was ended. Quite a few projects may not be carried out now as a result, including the F1 GP and a series of four Group A races in conjunction with New Zealand. Strangely enough, the latter idea is attracting more enthusiasm than the idea of a GP. *"You've got to realise two things,"* Tim Schenken, our guide round the future F1 GP circuit, explained, *"Firstly, there will be no local drivers, secondly, you're asking the public to watch a show they know nothing about."* He's right. It won't be easy to get over that Peter Brock or Larry Perkns aren't really made of the same stuff as Niki Lauda —not forgetting that in F1 racing, there are no fuel stops and that there is only one driver per car...

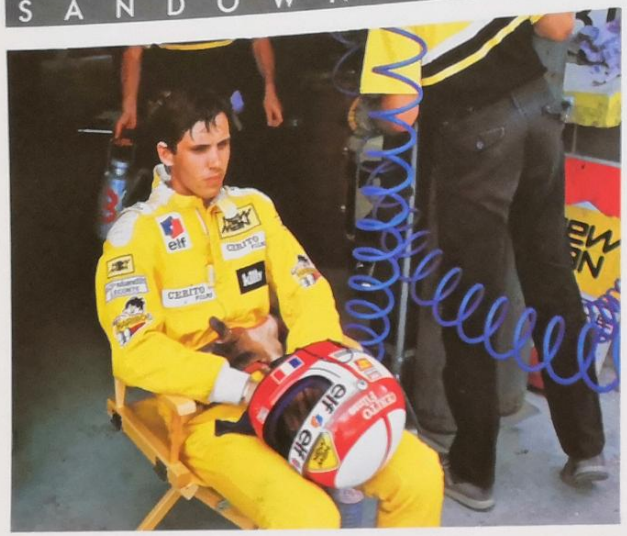




Winklehock was the first to make an unscheduled pit stop when his tyre blew, but no-one paid much attention to the incident. The gaps between the two contenders for the world title was uppermost in everyone's minds. On lap 24, there were 32s between them. Quite a gap. Boutsen was 19s behind the leader, sitting in second position and Schuppan was 26s behind Bellof who was having no problems getting past the back markers. But those who were hoping for a race full of crashes and incidents were quite wrong and the race settled down into a steady monotony until Ickx and Palmer both had punctures at almost the same time. It wasn't until the first fuel stops that an explanation could be given as to why all the punctures. The drivers claimed that the track was breaking up and that small sharp-edged stones were being thrown up all over the place. It must be said that certain competitors contributed a little. The Monza had spun off during the warm-up lap and then another car crashed straight into it. To get back on the track, the driver of the Chevrolet seemed to take particular delight in putting his foot down hard on the throttle, while his wheels were still on the grass, throwing up grass and stones all over the track a good hundred yards behind him. Not only that, the wind blew a great deal of dust onto the track. At 13:20 Tim Schenken was out on the track in the pace car. The URD, in last position, had gone off in front of the pits and had ended up on the track facing the on-coming cars. By the time the car had been extricated from this highly dangerous position, everyone had refuelled or gained ground on the leader, who had lost his advantage when the pace car came out, right in front of him. The laughing stock of the day was the Lola T510 which was even slower than the race management's 911 pace car. At the end of two laps, those who were following it realised that they were losing ground and began losing patience. They overtook the Lola despite the yellow flags behind waved. Winklehock was the first to set the example and five or six others immediately followed suit. The race officials didn't agree with this tactic and, instead of disqualifying the Lola T610, which was driving at a scandalously slow pace, they decided to make an example of one of the offending drivers and to disqualify him. Henri Pescarolo was the unhappy victim to be black flagged. In spite of all these incidents, it wasn't a difficult race to follow. Two cars (Bell/Bellof and Boutsen/

Alan Jones teamed up with Vern Schuppan. They started out well in their works Porsche but didn't manage to finish better than eigth.

The track surface breaking up was responsible for the many punctures during the event.



Paul Belmondo, the French actor's son looks on.

Hobbs) were doing battle for first place. Ickx/Mass and Palmer/Lammers didn't have much luck and at the end of the day they didn't know whether to cry or to laugh. The Canon was back in the pits every ten laps or so with a punctured tyre. Lammers even came limping back with a double puncture at one point. The Dunlop men were beginning to scratch their heads as they wondered if they were going to have enough tyres to last the race. Palmer and Lammers changed twelve tyres, Pescarolo/Ludwig eight, Ickx/Mass six, Schornstein/Winter/Belmondo five — compared with Bell/Bellof's unique flat tyre! No further explanations are needed to understand why they had so little trouble in winning. They were further aided in that Hobb's 956 came to a halt out on the circuit on lap 171, for some mysterious reason. The British driver couldn't get the No 33 car to budge an inch!

That was that. Bellof was world champion ahead of Mass, just like in the German championship. *"It doesn't matter how hard you try some days, things just don't work out as you would like them to. It's really a shame for Jochen,"* commented Ickx.

And the rest of the field? The most fortunate were the Kremer brothers' entries. They only had five punctures with their Good Year tyres. They finished fourth and fifth just behind the Canon which had to make do with title of *"first privateer"*. John Fitzpatrick believed during most of the race that his car would be bestowed with the title, until his number one car was forced into retirement and then Konrad went off whilst he was in fourth position. Fitz didn't have much of a season this year, which was a pity in that he was one of the factory's main rivals. However he could claim some glory for first local crew home; Miedecke/Bond finished 6th after an incident free race.

The Joest team finished in the wings with Pescarolo/Ludwig coming in 7th. Apart from their share of punctures, the team was also slowed by their engine which was low on power —hardly surprising since it had just done Fuji. New Man were more than pleased with Belmondo's 11th placing. He had carried out his instructions to the letter — finish the race.

As for the Australians, they came and saw... The Monza was disqualified in the end for receiving outside help. It had shown it was competitive during the first ten laps only. Last at the start, two laps behind Bell/Bellof by lap 20, it was never among the Group C leaders and it lost a lot of time — and the front cover — when it tangled with Sir Jack Brabham's 956 —who was there to shoot some "live" action packed scenes! The Romano-Ford had a better end to the race but was never really in with a chance. Nor was the JWS-Mazda which silently (not easy for a Mazda) got on with the job of going round the Sandown Park circuit before retiring due to mechanical failure. Neil Crang was certainly the happiest Australian driver after the race. He chalked up yet another Group C2 victory in his Tiga, whose drive he has been sharing since the beginning of the season with Gordon Spice. Schenken has let on that Crang has taken shares in his company and is nurturing ambitious projects for the years to come. The Tiga has been regularly better than the Albas since Spa and during the whole of the second half of the season. They had been suffering from various ailments, including cylinder head gasket problems for Facetti and ignition failure for Dacco. The Jelinski/Nodes/Gebhardt trio finished second in C2, their Gebhardt was powered by a Ford engine. The other 843-DFV retired during the race following a fire which broke out and the 842-BMW retired when it went off twice at the same spot. It appears that this team is aiming a little too high which explains the negative results.

And so ends a rather odd Endurance Championship with neither the Porsche nor Lancia works teams present at all the rounds (two boycotts and three withdrawals for Lancia). The 1984 season didn't somehow seem complete but for 1985, things look much brighter, although for the moment things have only reached the planning stage. Let's hope that next year will be less stormy... ■

A glance at the circuit itself

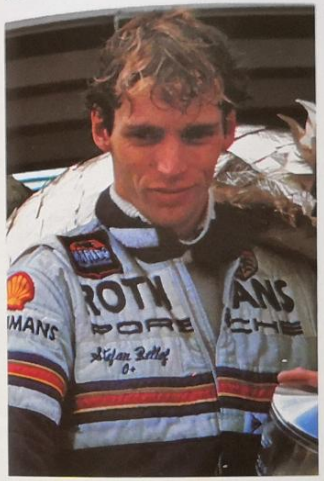
Although a number of established circuits exist in Australia, the CAMS decided to stage its first world championship qualifying event at the Sandown Park horse-race track. The principle, of course, isn't new — remember Aintree, where the British GP was held as recently as 1962. The touch of colour and character added by the lawns and stands make this sort of venue pleasingly original. However, the design of the circuit did leave us more than a little surprised with an expected average speed of only 80 mph! A trip round the circuit showed us why.

Your lap starts with a 900 yard straight which terminates in a very tight 90° left-hander where the slightest mistake could mean trouble. An over-sized sand pit has been added to slow those who forget to turn. A slight dip follows and takes you into a tight esse-bend, followed immediately by another 90° left. Due to the extreme narrowness of the track at this part of the circuit, there's inevitably a battery of photographers waiting. Another 900 yard straight leads you into a nastily cambered hairpin left. An identical right hairpin a hundred yards on means that cars cross three times in quick succession. Follows a tricky left-right-left, then two more consecutive 90° lefts. Average speed at this point is no more than 50 mph! To complete the lap, for some reason two bends have been included to reduce entry speeds into the start/finish straight.

Motorsport made an appearance at Sandown Park as early as 1903 but a modern style circuit did not exist until 1961. In 1984, the length of the circuit was increased from 1.9 miles to 2.4 miles and only one race had been staged there before the WEC round, the Castrol 500 in September, which was held in order to check that everything was operational. It must be said that the less powerful cars present at that event were bound to have a less damaging effect on the surface than the thoroughbred European Group C cars but nobody was expecting the 100-odd punctures which occurred during the WEC round. However the organisers had tried.

SANDOWN PARK 1000 KM

11th and final round of the World Endurance Championship for drivers.
Date: December 2nd, 1984.
Circuit length: 3.9 km/2.43 miles.
Race length: 257 laps or 1002.3 km/626.4 miles.
Weather: Fine and dry for both qualifying and the race.
Attendance: 15,000.
Entries: 31; Scrutineered: 30; Qualified: 30; Starters: 29; Classified: 17; Unclassified: 2. Disqualified: 1; Retirements: 1.



SUCCESSIVE LEADERS

Lap 1: Jones/Schuppan
Laps 2-36: Bell/Bellof
Lap 37: Hobbs/Boutsen
Lap 38: Ickx/Mass
Laps 39-74: Bell/Bellof
Laps 75-93: Hobbs/Boutsen
Laps 94-206: Bell/Bellof

MAIN PITSTOPS AND RETIREMENTS

Warm-up lap:
Faure, retired (engine)
Grice, (Monza), spun off
Lap 1: **Mass**, spun off
Romano, accident, overtaking a backmarker
Lap 2: **Grice** (Monza) gearbox
Lap 47: **Jones**, made a wrong pitstop at the Canon pits!
Lap 35: **Dacco**, brake problems
Lap 73: **Winther**, retired (shunt)
Pace car on track
Lap 77: Track free
Lap 90: Tangle **Romano** with **Brabham**
Lap 103: **Smith-Haas** (off road)
Lap 105: **Harrower**, retired (fire)
Lap 124: **Facetti**, retired (cylinder head gasket)
Lap 126: **Muller**, retired (rear suspension)
Lap 138: **Cook**, retired (crankshaft)
Lap 180: **Jones**, turbo problems
Lap 170: **Dacco**, retired (ignition)
Lap 171: **Hobbs**, retired (electrical failure)
Lap 182: **Harris**, retired
In view of the extraordinarily high number of punctures, we are unable to give a precise list of all the punctures, even for top teams (12 wheel changes for Canon).

IMPORTANT FACTS

- First WEC round held in Australia
- First world championship round held at the Sandown Park race track
- Maiden-race in a WEC event for numerous drivers including, Paul Belmondo, Cathy Muller and Sir Jack Brabham
- Four Rothmans Porsches were at the start
- Three Gebhardts were entered.

GROUP B FIA TROPHY

1. BMW	100 points
2. Porsche	52 points

GROUP C FIA TROPHY

1. Alba (Giannini)	88 points
2. Lola (Mazda)	67 points
3. Tiga (Ford)	50 points
4. Gebhardt (BMW)	34 points
5. Rondeau (Ford) and Alba (Ford)	30 points
7. Lotec (BMW)	20 points
8. Ecosse (Ford) and MCS (Mazda)	15 points
10. Mazda	14 points
11. Lola (Ford)	12 points
12. Ceekar (Ford)	8 points
13. Sthemo (BMW) and MCS (BMW)	6 points

STARTING GRID

No 2 Bell/Belloff
Porsche 956
1m 31.6s

No 1 Ickx/Mass
Porsche 956
1m 32.3s

No 3 Schuppan/Jones
Porsche 956
1m 32.4s

No 33 Hobbs/Boutsen
Porsche 956
1m 32.6s

No 7 Ludwig/Pescarolo
Porsche 956
1m 32.9s

No 10 Fouche/Van der Merwe
Porsche 956
1m 33.6s

No 55 Keegan/Konrad
Porsche 956
1m 35.2s

No 12 "Winter"/Schorstein/Belmondo
Porsche 956
1m 36.00s

No 34 Miedecke/Bond
Porsche 956
1m 36.00s

No 70 Spice/Crang
Tiga GC 284-Ford
1m 38.00s

No 61 Romano/Costanzo
Romano Ford
1m 38.4s

No 56 Brabham/Dumfries
Porsche 956
1m 38.9s

No 131 Kendall/Cook/Fitzgerald
Lola T 600-Chevy
1m 39.5s

No 17 Kroesemeijer/Pareja/Janson
Porsche CK5
1m 40.5s

No 80 Finotto/Facetti
Alba-Giannini
1m 40.2s

No 64 Grice/Johnson
Harrop
Chevrolet-Monza
1m 40.3s

No 74 Jelinski/Nodes
Gebhardt
Gebhardt-Ford
1m 40.5s

No 72 Harrower/Crichton
Davison
Gebhardt-Ford
1m 42.1s

No 81 Dacco/Lucio
Alba-Giannini
1m 42.2s

No 62 Richards/Longhurst
BMW 320
1m 44.4s

No 73 Muller/Smith/Hass-Ransom
Gebhardt-BWM
1m 44.6s

No 99 Rossiter/Baker/Evans
Tiga-Ford turbo
1m 44.8s

No 65 Harris/Hanger/Jones
JWS-Mazda
1m 46.6s

No 63 Thomson/Jones
Mercedes-Chevrolet
1m 47.1s

No 90 Winther/Lars Viggo
URD-BMW
1m 47.2s

No 106 Gall/Heger
BWM M1
1m 50.5s

No 83 Jones/Burroughd/Bartlett
Lola T 610-Ford
1m 53.9s

No 111 Faure/Leim/Clark
Porsche 930 Turbo
1m 55.7s

CONSTRUCTORS' FINAL RESULTS

1. Porsche	512 points
2. Lancia	57 points
3. Alba (Giannini)	12 points
4. Alba (Ford)	8 points
5. Tiga (Ford)	8 points
7. Rondeau (Ford)	5 points
8. Lola (Mazda) and Toyota	4 points
10. MCS (Mazda)	3 points
11. BMW	2 points
12. Ecosse (Ford) and Lola (Chevrolet)	1 point

DRIVERS' WORLD CHAMPIONSHIP FINAL RESULTS

1. Bellof: 183 points; 2. Mass: 127 points; 3. Ickx: 104 points; 4. Pescarolo and Bell: 91 points; 6 Palmer and Lammers: 75 points; 8. Stuck: 54 points; 9. Hobbs: 51 points; 10. Brun: 49 points; 11 Keegan: 44 points; 12. Ludwig: 39 points; 13. Schornstein: 38 points; 14. Barilla: 37 points; 15. Grohs: 36 points; 16. Nannini: 35 points; 17. Fouche: 34 points; 18. «Winter»: 29 points; 19. Baldi: 28 points; 20. Schuppan: 27 points; 21. Larrauqi-Sigala and Watson: 26 points; 24. Winkelhock: 24 points; 25. Konrad: 23 points; 26. Van der Merwe: 22 points; 27. Patrese: 20 points; 28. Wollek-Boutsen and Sutherland: 18 points; 31. Merl: 17 points; 32. Rondeau-Paum and von Bayern: 15 points; 35. Dacco-Coppelli and Regout: 14 points; 38. Edwards: 12 points; 39. Spice-Johansson/Martini-Akin-Barberio-Viatelli and Gellini: 10 points; 46. Jones: 9 points; 47. French/Facetti-Finotto-Surer-Thackwell-Nagazaka-K. Suzuki and Sebent: 8 points; 55. Crang-Bond-Miedecke-Belim-Jarler-Baker-Rossifer-Lockhart and Laessig: 6 points; 64. Schimegi/Lida-Sakamoto-Busby-Knoop-Winther-Lars/Viggo: 5 points; 70. Yver-de Dryver-Gabbiani-Elgh and Sekiya: 4 points; 75. Wilds-Senna-Grand-Katayama and Morton: 3 points.

RESULTS

1. Bell/Bellof (Porsche 956) 206 laps or 803.4 km/502.1 miles in 6 hours 01m 30s, at an average speed of 133.344 kph/83.34 mph. 2. Ickx/Mass (Porsche 956) 3 laps; 3. Palmer/Lammers (Porsche 956) 4 laps; 4. Fouché/Van der Merwe (Porsche 956) 6 laps; 5. Winkelhock/French (Porsche 956) 6 laps; 6. Miedecke/Bond (Porsche 956) 8 laps; 7. Pescarolo/Ludwig (Porsche 956) 9 laps; 8. Jones/Schuppan (Porsche 956) 10 laps; 9. Keegan/Konrad (Porsche 956) 12 laps; 10 and 1st C2: Spice/Crang (Tiga-Ford) 17 laps; 11. Schornstein/"Winter"/Belmondo (Porsche 956) 22 laps; 12. Jelinski/Nobes/Gebhardt (Gebhardt-Ford) 25 laps; 13. Koresemeijer/Parera/Janson (Porsche CK5) 27 laps; 14. Richards/Longhurst (BMW 320) 28 laps; 15 and **1st Gr. B** Gall/Hedeger (BMW M1) 36 laps; 16. Rossiter/Baker/Evans (Tiga-Ford turbo) 50 laps; 17. Bartlett/Burrows/Jones (Lola T 610-Ford) 86 laps.
Unclassified: (Insufficient distance covered):
Dumfries/Brabham (Porsche 956): 108 laps covered and Romano/Costanzo (Romano-Ford) 106 laps.
Race lap record:
Bellof: 3.9 km/2.43 miles in 1m 34.5s at an average speed of 149.362 kph/93.35 mph.

Nos 2 and 3 of the Rothmans Porsche team (DPPI)

THE TWO ROTHMANS PORSCHE 956s DRIVEN BY BELL/BELLOF HERE LEADING ICKX/MASS. THEY FINISHED IN THAT ORDER

Gebhardt-BMW (DPPI)

CATHY MULLER ON HER MAIDEN-RACE IN A WEC ROUND WAS FORCED INTO RETIREMENT WHEN THE SUSPENSION SNAPPED

HI THERE CHAMPS!

MARIO ANDRETTI (CART), TERRY LABONTE (NASCAR), RANDY LANIER (IMSA), MICHAEL ROE (CANAM), TOM GLOY (TRANSAM) AND ARIE LUYENDYK (SUPER VW) WERE THE 1984 NORTH AMERICAN HEROES IN THEIR RESPECTIVE CATEGORIES.

Unlike the European scene, where the F2 championship has been stopped, where Endurance Racing lost a lot of its popularity, North American motor racing has, on the other hand, moved forward in leaps and bounds. CART has got back squarely onto its feet. IMSA is doing very well, thank you, and NASCAR is as popular as ever with the American fans. It should just be mentioned that a total of over three (!) million spectators showed up during the year —and there's no denying the fact that the progress sheet is looking very positive for 1984. The Americans have always been the forerunners in matters of how to entertain the crowds. Unfortunately, with our European way of thinking, there's no way we could try and match them, it would need a radical psychological change. Some have tried but we just lack the necessary infra-structure. Speedway-style circuits are a typical American speciality, for example.

But, it wouldn't be a true picture of reality if you thought that all US championships were fought out on these *"speedways"* or *"super-speedways"*. IMSA races are regulaly held on road circuits or on the twisting in-field sections of the fast oval circuits. CART rounds are held on both types of circuit. It should be borne in mind that the Americans really love seeing records broken, like a lap record at an average speed of almost 220 mph ! Mixing sport with a good show makes the Americans feel that they're getting their money's worth. There lies the key to success.

CART – MARIO 16 YEARS ON...

No-one was very sure what the future would be following the USAC-CART split-up during the late seventies. However, the early eighties saw the CART championship getting off to an encouraging start, and it was soon as healthy as before, despite the fact that oval circuits were not being used as much as before. Some say, that the Americans have *"Europeanised"* themselves in this sense, but the adrenalin never fails to flow when you hear the CART single seaters coming to life at either the Pocono or Brooklyn circuits. Indianapolis hasn't lost its prestigious title of staging "THE" race of the season.

Al Unser Senior was crowned the 1983 champion at the wheel of his Penske and was closely followed by Teo Fabi in the March 83C. Now, British-designed cars have the virtual monopoly of the CART championship, and it looks as though as they are there to stay for a while to come. Bye Bye to Penskes, Eagles and Wildcats... (out of the top twenty three in 1984, there were twenty one competitors using Marches). However it was the Budweiser/Haas/Paul Newman Lola, driven by Mario Andretti that won the championship.

The former Formula 1 champion had quite a hard time in 1983 with the Lola T700. Apparently, the new T800 model, which was ready at the opening round, seems better adapted to the requirements of CART. Danny Sullivan, another regular Lola driver, (with the Doug Shierson team) also had his fair share of success, clocking up three victories. In all, these T800s have chalked up nine wins between them out of a possible sixteen.

Forty four-year old Mario Andretti is an obstinate man, especially when he knows that he's on to a good thing. His most serious rival right until the end of season, was Tom Sneva, who scored three wins, but was also more consistent in his results — largely as a result of his car's reliability. Sneva belongs to a team whose managers are well versed in racing matters — who needs introducing Teddy Mayer and Tyler Alexander !

Triple Formula USAC champion, Mario Andretti, has got back into his old habits. The last time he clinched a title was Third-position man of the season was thirty one-year old Bobby Rahal, renowned for his *"European"* activities, but not so much at this level — he was elected the best *"Rookie"* — beginner —of 1982. The Truesport driver, managed by Jim Trueman, had a difficult and costly first half to the season but, after the ideal carburation had been found, Rahal didn't look back. There was no stopping him. Tall Bobby came home first twice, which earned him third place at the end of the year.

Although Danny Sullivan lost his Tyrrell F1 drive, he found a (good) home with the *"Dominos Pizza"* team. He had a splendid season for his first full season in

Rick Mears won at Indianapolis for the second time.

Left. Tom Sneva was the best of the March armada. Danny Sullivan (No 30) was always there to help Mario Andretti defend the Lola T800 colours.

CART is a dangerous form of racing. Other incidents induded those of Chip Ganassi, Jacques Villeneuve, Kevin Cogan, Daly, Poncho Carter as well as Rahal. Although engine power has been limited, it's quite mind-boggling to see the speed at which they go through the turns.

CART racing also features three sons of famous drivers : Al Unser Jr, Michael Andretti (both aged twenty two) and Geoff Brabham. Al Unser has proved that he will soon be a man to beat and gave a fine demonstration in this his second complete season of CART. His maiden-win was at the Portland street circuit, similar to Dallas or Long Beach. He is expected to be hired on at a top level team shortly. Michael Andretti's 6th place was pinched from under his nose at the Las Vagas round, by Unser Jr - but he too, had had time to prove that he was his father's son alright.

In passing, it should be noted that the 2.65l turbo DFX Ford Cosworth engine powers 95 % of CART single seaters and that a placing in the points of a V8 Pontiac is something exceptional. Kevin Cogan and the 1983 Super Vee champion, Ed Pimm, managed to do just that, both driving the Eagle Pontiac for the Gurney/Curb outfit.

For the record, 1984 was the year which saw the testing of a Ligier/Curb, (which wasn't followed up), and the incredible second place chalked up by *"Rookie"* Roberto Guerrero. Some *"European"* drivers also tried their luck out a couple of times on the American circuits - Giacomelli, Thackwell, Acheson and the Fabi brothers, who took turns in driving a March and then a Lola for the Forsythe team. To give an idea of the sort of money involved, it's worth mentioning that the championship winner is presented a cheque for $300,000 ! In addition, Mario Andretti was also offered many other luring prizes, including a Cadillac Fleetwood !

CART

1. MARIO ANDRETTI (Lola T800 Ford DFX), 176 points ; 2. Tom Sneva (March 84C Ford DFX), 163 points ; 3. Bobby Rahal (March 84C Ford DFX), 137 points ; 4. Danny Sullivan (DSR-17-Lola T800 Ford DFX) and Rick Mears (March 84C Ford DFX), 110 points ; 6. Al Unser Jr (March 84C Ford DFX), 103 points ; 7. Michael Andretti (March 84C Ford DFX), 102 points ; 8. Geoff Brabham March 84C Ford DFX), 87 points ; 9. Al Unser (March 84C Ford DFX), 76 points ; 10. Danny Ongais (Marc 84 C Ford DFX), 53 points.

CHAMPIONNAT CART 1984

CART and had a memorable win at the Pocono Super-speeday when, after a way back in 1969, when he also won the Indianapolis 500 Miles, for the first and only time.

heart-pounding sprint-to-the-finish, he crossed the line first, ahead of both Rick Mears and Bobby Rahal ! He finished fourth in the championship, equal with Mears — the Indianapolis winner, and was also awarded the trophy for the best combined results on the three 500 Miles rounds (Indy, Michigan, Pocono). Unfortunately, Meers fell victim to a serious accident at testing for the Canadian Sanair round in which his ankles took the brunt of the shock. His season ended there, but he should be back during 1985.

Mears wasn't the only one to prove that

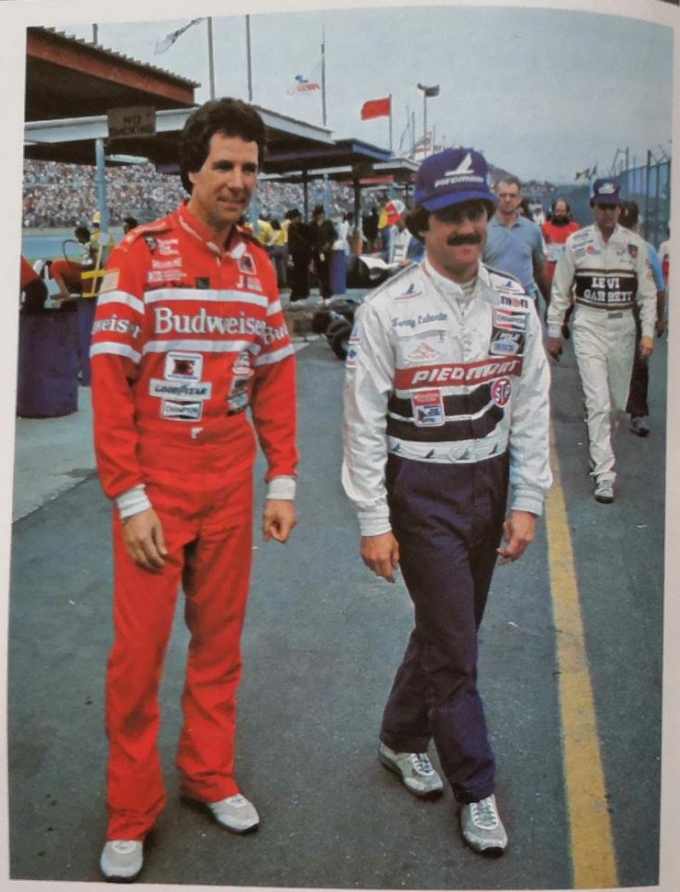
1984 CART CHAMPIONSHIP

Points system : 20 - 16 - 14 - 12 - 10 - 8 - 6 - 5 - 4 - 3 - 2 and 1 for first twelve classified + 1 point (pole position) + 1 point (longest race leader)

			Long Beach	Phoenix	Indianapolis	Milwaukee	Portland	Meadowlands	Cleveland	Michigan	Road America	Pocono	Mid-Ohio	Sanair	Michigan	Phoenix	Laguna Seca	Las Vegas	Total points
1. Mario ANDRETTI (USA)	Lola T 800	Ford DFX	22	—	5	21	10	22	17	21	22	—	22	6	20	1	17	16	176
2. Tom SNEVA (USA)	March 83 C	Ford DFX	14	22	1	16	8	6	—	17	—	12	6	—	16	12	3	21	163
3. Bobby RAHAL (USA)	March 84 C	Ford DFX	—	6	6	—	—	2	1	—	16	14	16	18	10	21	21	6	137
4. Danny SULLIVAN (USA)	DSR/Lola T 800	Ford DFX	—	8	—	—	—	16	20	—	—	3	—	20	14	20	4	—	110
Rick MEARS (USA)	March 84C	Ford DFX	—	—	21	17	3	12	14	12	18	10	Abs	Abs	Abs	Abs	Abs	Abs	110
6. Al UNSER Jr. (USA)	March 84C	Ford DFX	—	—	—	14	21	12	—	—	—	—	—	8	8	16	12	12	103
7. Michael ANDRETTI (USA)	March 84C	Ford DFX	3	14	10	12	1	—	14	—	—	—	—	14	6	14	14	—	102
8. Geoff BRABHAM (AUS)	March 84C	Ford DFX	16	—	—	—	16	14	5	4	10	—	—	—	2	—	10	10	87
9. Al UNSER (USA)	March 84C	Ford DFX	—	14	10	—	—	5	3	—	14	5	5	—	12	—	8	—	76
10. Danny ONGAIS (USA)	March 84C	Ford DFX	—	10	4	3	2	—	—	—	Abs	10	Abs	—	14	10	—	—	53
11. Robert GUERRERO (COL)	March 84C	Ford DFX	—	16	—	—	—	—	—	10	10	2	—	—	—	—	6	8	52
12. Howdy HOLMES (USA)	March 84C	Ford DFX	—	16	—	—	—	—	1	—	—	—	8	4	5	—	—	—	44
13. Josek GARZA (MEX)	Wildcat/March 84C	Ford DFX	—	Abs	3	6	—	4	—	2	6	—	2	12	3	5	—	3	42
14. Gordon JOHNCOCK (USA)	March 83 C/84C	Ford DFX	2	3	—	8	4	1	—	12	4	2	3	—	Abs	—	Abs	—	39
15. Emerson FITTIPALDI (BR)	March 83C/84C	Ford DFX	10	1	—	Abs	Abs	8	—	Abs	Abs	Abs	12	—	1	Abs	Abs	—	30
Jacques VILLENEUVE (CDN)	March 84C	Ford DFX	8	—	—	Abs	8	—	4	Abs	Abs	Abs	Abs	5	Abs	5	—	—	30
17. John PAUL Jr. (USA)	March 84C	Ford DFX	—	—	—	Abs	Abs	Abs	Abs	8	—	—	4	Abs	—	—	Abs	2	14	28
Al HOLBERT (USA)	March 84C	Ford DFX	—	—	12	—	—	10	6	—	—	—	—	Abs	—	—	—	—	—	28
19. Derek DALY (IRL)	Wildcat/March 84C	Ford DFX	6	—	—	Abs	12	—	8	—	—	Abs	—	—	Abs	Abs	Abs	Abs	26
20. Chip GANASSI (USA)			—	2	—	2	—	4	16	—	Abs	Abs	Abs	Abs	Abs	Abs	Abs	Abs	24

21. Pacho CARTER (USA) (March 84 C Ford DFX) 22 points - 22. Johnny RUTHERFORD (USA) (March 84 Ford DFX) 20 points - 23. Scott BRAYON (USA) (March 84 C Buick) 19 points -24. Kevin COGAN (USA) (Liger LC 02 Ford DFX/Eagle 84 Pontiac/March C Ford DFX) 17 points - 25. equal Teo FABI (I) 84 C Ford DFX) and Dick SIMON (USA) (March 84 C Ford DFX) 15 points - 27. Jim CRAWFORD (GB) (Theodore T 183/March 82 C Ford DFX) 12 points - 28. Corrado FABI (I) (Lola T 800 Ford DFX) 11 points -29. equal Peter HALSMER (USA) (Penske PC 10/March 84 C Ford DFX/Eagle 84 Pontiac) and Chris KNEIFEL (USA) (Primus 84 Ford DFX) 9 points - 30. A.J. FOYT (USA) (March 84 C Ford DFX) 8 points -31. equal Herm JOHNSON (USA) (March 83 C Chevy/ 84 C Ford DFX), Bruno GIACOMELLI (I) (March 84 C Ford DFX), Arie LUYENDYK (NL) (March 84 C Ford DFX), John MORTON (USA) Eagle 83 C/March 83C/Chevy) and Ed PIMM (USA) (March 83 Chevy/ Eagle 84 Pontiac) 5 points - 36. Gary BETTENHAUSEN (USA) (March 843 C Ford DFX) 3 points - 37. George SNIDER (USA) (March 84 C Ford DFX) 2 points - 38. Dennis FIRESTONE (March 82 C Ford DFX) 1 point.

NASCAR – TERRY LABONTE, THE 18 TH...



The NASCAR championship was already at its eighth edition when Terry Labonte drew his first breath in 1956, and this year, he became the second youngest winner ever behind Richard Petty, who clinched his first title in 1964, at the tender age of 27. Terry Labonte, a 28-year old Texan living in North Carolina, is the 18th driver to have his name added to the most popular American championship winners list. The championship reads like a family tree, with the trunk made up of the Petty family and their ten titles — (seven for Richard and three for pop Lee).

The driver of the Stratagraph/Piedmont Airline team's Chevrolet Monte-Carlo, sporting No 44, started NASCAR racing in 1979 and wasted no time in showing he meant business. His first win in the Grand National, the Winston Cup, didn't come until 1982, followed by another first-place finish that same year and two this season. At the outset to the season, Labonte was one of the punters' favourites and, despite the absence of wins, he was always out there in front with the leaders. Labonte had been picked as a potential winner following his excellent results during the last fifteen rounds of the previous season — he notched up as many points as Allison and Waltrip, the championship leaders.

Labonte finally clinched the title at the thirtieth and closing round of the *"Grand National"*, the sixth consecutive year that that had happened. Petty had obtained his title in 1979 ahead of Waltrip at the last race. In 1980, it had gone to Dale Earnhardt, with Cale Yarborough in his tracks, whilst in 81 and 82, Darrell Waltrip had had to wait until the last championship lap until he was sure that his numerous wins were enough to give him the title. The following year he was pipped at the post by the veteran Bobby Allison, at his sixteenth try, by one of the closest margins recorded.

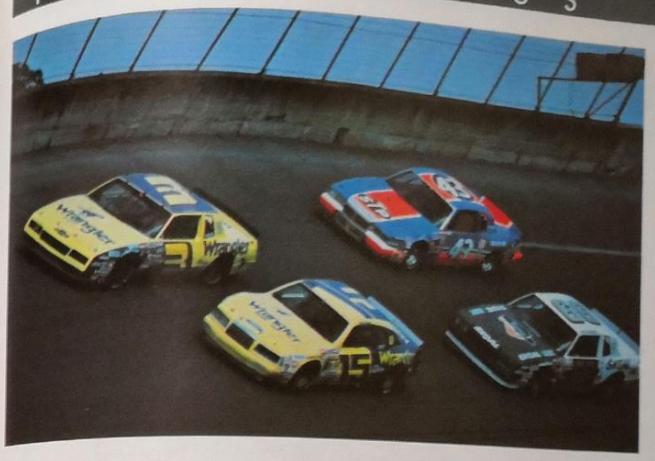
The reason why suspense is always guaranteed, results from the points system. The winner gets 175, the second, 170, and then 165, 160, 155, 150. The six following have a four-point difference between them, (146, 142, 138, etc.), and then from 12th position to the last classified driver, the points are awarded decreasingly with a three-point margin. Pole-position-man is given an extra five points and all race leaders are awarded a five point bonus. It's easy to appreciate why this points system is accepted by everyone and the excitement it adds to the championship. In this way, the race runner-up can score more points than the winner himself!

This year was no exception to tradition, the winner had to wait until the ultimate Riverside round. Labonte was harrassed all the way by 44 year-old Harry Grant, a relatively *"young"* NASCAR competitor, since he started competing in 1979. Darrell Waltrip was without a doubt the unluckiest loser of the year. Despite his seven wins, Waltrip, whose car is prepared by the famous preparer, Junior Johnson, was plagued with a bout of retirements. In 1984 he was the man credited with the highest number of pole positions and he will certainly be one of the main contenders for the 1985 title.

The Chevrolet, Monte-Carlos were the most successful cars of the year but, if the Ford Thunderbirds can improve on reliabilty, they will will have no trouble in showing just how competitive they really are in the hands of *"new wave"* drivers, Bill Elliott and Ricky Rudd. Former USAC driver, Tim Richmond, and Richard Petty had three wins in the Pontiac GPs, whereas the title holder, Bobby Allison, only mangaed one in the Buick Regal.

The *"Grand National"* season started at the February Daytona round and closed at the end of November at Riverside. In all there were twelve different winners of whom Geoff Bodine was voted the *"Most Popular 1984 Driver"*. A new record was established — that of the number of race leader changes at a single race : command was switched back and fro no less than 71 times at the Talladega 500 Miles! At the same round, Yarborough obtained pole position at an amazing average speed of 203 mph! He also holds the lap record at Daytona. Yarborough has clinched the NASCAR title three times (76, 77, 78), and has won 81 rounds and now only races at the more prestigious of the championship events. He is still a force to be reckoned with and won the Daytona Pocono and Talledega rounds this year, just to suppress any doubts that anyone might have been harbouring. And in order to push the point a little further home, he also took home the first prize of £135,000 at the *"Race of Champions"*.

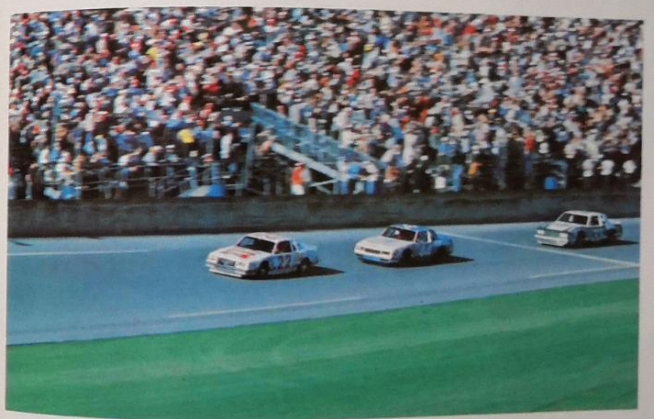
The NASCAR championship is the richest in the States. The best of the 84 competitors, like Labonte, Waltrip, Grant or Elliott must have won something between £400 - £600,000 each... not counting personal contracts and sponsors! But then, the teams have to be organised to support the rythm of 30 races a year. Each car costs from £75,000 to £90,000 each. A good twenty races were televised and there were 1¾ million spectators through the year.



"I'm Darrell, and he's Terry..." Waltrip (left) won seven races, but the title went to Labonte.

Spot the constructor! Chevrolet with Earnhardt (No 3) and Parsons No 66). Pontiac (No 43), driven by Petty and Ford (No 15) with Rudd at the wheel.

Title relaying: the 83 champion, Allison, comes under attack from the 84 heroes, Labonte and Grant.



NASCAR-GRAND NATIONAL

1. TERRY LABONTE (Chevy Monte-Carlo), 4,508 points; 2. Harry Gant (Chevy Monte-Carlo), 4,443 points; 3. Bill Elliot (Ford Thunderbird), 4,377 points; 4. Dale Earnhardt (Chevy Monte-Carlo), 4,265 points; 5. Darrell Waltrip (Chevy Monte-Carlo), 4,230 points; 6. Bobby Allison (Buick Regal), 4,094 points; 7. Ricky Rudd (Ford Thunderbird), 3,918 points; 8. Nell Bonnett (Chevy Monte-Carlo), 3,802 points; 9. Geoff Bodine (Chevy Monte-Carlo), 3,734 points; 10. Richard Petty (Pontiac Grand-Prix), 3,643 points; 11. Ron Bouchard (Buick Regal), 3,609 points; 12. Tim Richmond (Pontiac Grand-Prix), 3,505 points; 13. Dave Marcis (Pontiac Grand-Prix), 3,416 points; 14. Rusty Wallace (Pontiac Grand-Prix), 3,316 points; 15. Dick Brooks (Ford Thunderbird), 3,265 points.

1984 NASCAR GRAND NATIONAL

ROUNDS		1	2	3	4	5
DAYTONA	500	C. YARBOROUGH	D. EARNHARDT	D.WALTRIP	N. BONNETT	B. ELLIOT
RICHMOND	400	R. RUDD	D. WALTRIP	T. LABONTE	B. ELLIOTT	D. BONNETT
ROCKINGHAM	500	B. ALLISON	T. LABONTE	L. SPEED	R. PETTY	B. BAKER
ATLANTA	500	B. PARSONS	D. EARNHARDT	C. YARBOROUGH	R. PETTY	B. ALLISON
BRISTOL	500	D. WALTRIP	T. LABONTE	R. BOUCHARD	D. MARCIS	T. RICHMOND
WILKERSBORO	500	H. GANT	H. GANT	R. RUDD	T. LABONTE	K. PETTY
DARLINGTON	400	T. RICHMOND	T. LABONTE	B. ELLIOTT	C. YARBOROUGH	D. EARNHARD
MARTINSVILLE	500	D. WALTRIP	R. BOUCHARD	D. WALTRIP	B. ALLISON	N. BONNET
TALLADEGA	500	G. BODINE	H. GANT	B. BAKER	B. ALLISON	B. PARSONS
NASHVILLE	500	C. YARBOROUGH	N. BONNETT	G. BODINE	R. RUDD	R. BOUCHARD
DOVER	420	D. WALTRIP	T. RICHMOND	T. LABONTE	B. ELLIOT	D. EARNHARD
CHARLOTTE	500	R. PETTY	D. EARNHARDT	R. BOUCHARD	H. GANT	G. BODINE
RIVERSIDE	600	B. ALLISON	BONNET/PARSONS	B. ALLISON	G. BODINE	D. EARNHARD
POCONO	400	T. LABONTE	H. GANT	T. LABONTE	B. ELLIOTT	T. RICHMOND
BROOKLYN	500	C. YARBOROUGH	D. EARNHARDT	D. WALTRIP	H. GANT	L. SPEED
NASHVILLE	400	B. ELLIOTT	D. WALTRIP	D. EARNHARDT	R. BOUCHARD	B. ALLISON
POCONO	420	G. BODINE	C. YARBOROUGH	B. ELLIOTT	T. LABONTE	B. PARSONS
TALLADEGA	500	H. GANT	B. BAKER	T. LABONTE	B. ALLISON	C. YARBOROUGH
BROOKLYN	500	D. EARNHARDT	T. LABONTE	B. ELLIOTT	H. GANT	C. YARBOURQUGH
BRISTOL	400	D. WALTRIP	B. ALLISON	D. BROOKS	D. MARCIS	H. GANT
DARLINGTON	500	T. LABONTE	T. RICHMOND	B. BAKER	R. WALLACE	R. RUDD
RICHMOND	500	H. GANT	R. RUDD	D. EARNHARDT	G. BODINE	R. PETTY
DOVER	400	D. WALTRIP	T. LABONTE	R. RUDD	D. MARCIS	D. EARNHARDT
MARTINSVILLE	500	H. GANT	T. LABONTE	B. ELLIOTT	H. GANT	N. BONNETT
CHARLOTTE	500	D. WALTRIP	B. PARSONS	C. YARBOROUGH	H. GANT	T. LABONTE
WILKSBORO	500	B. ELLIOTT	H. GANT	B. ALLISON	N. BONNETT	R. WALLACE
ROCKINGHAM	400	D. WALTRIP	H. GANT	T. LABONTE	D. WALTRIP	B. ALLISON
ATLANTA	500	B. ELLIOTT	B. ELLIOTT	R. RUDD	B. PARSONS	B. ALLISON
RIVERSIDE	500	D. EARNHARDT	T. RICHMND	T. LABONTE	B. ELLIOTT	B. PARSONS
		G. BODINE				

CONSTRUCTORS' WINS
21: Chevrolet Monte-Carlo (C. Yarborough - B. Parsons - D. Waltrip - G. Bodine - T. Labonte - D. Earnhardt - H. Gant)
4: Ford Thunderbird (R. Rudd - B. Elliott)
3: **Pontiac Grand Prix (T. Richmond - R. Petty)**
2: Buick Regal (B. Allison)

POLE POSITIONS
5: D. Waltrip
4: C. Yarborough - H. Gant - R. Rudd
3: T. Labonte - B. Elliott - G. Bodine
2: B. Parsons
1: B. Baker (Ford Th... Monte Carlo) - N. Bonnett (Chevy Monte Carlo)

TRANSAM – GLOY CROWNED

The Transam championship was immensely successful this year with almost 140 drivers competing.
The Transam is a spectacular formula, dominated by V8s. Noise, colour and a lively atmosphere are the ingredients that make the *"Transam Circus"* a success as it covers the States from East to West with a few detours here and there into Canada.
The Chevrolet Corvette and the Camaro were the uncontestable 1983 leaders; veteran Britisher David Hobbs, won the championship. However, the 1983-84 inter-season was spent preparing the riposte — the Lincoln-Mercury Capri changed everything. Three Mercurys were prepared and they won almost everything there was to win — including the constructors' championship and the first three places of the drivers' championship.
The winner, 37 year-old Californian, Tom Gloy, is quite well-known outside the States, but this was his first home title. Gloy's career began in 1972 in F Ford. He then tried F Atlantic in the States (1975) and in New Zealand (1977), before a spell in Europe where he competed in a few European F2 rounds. He's been at Transam now since 1980, but not exclusively, he also enjoys CART and IMSA racing occasionally. This year he drove a March 84C/Simoniz at Indy and a Mustang Zakspeed GTP in an IMSA race.
The other man to dominate the championship with Gloy, was Greg Pickett, also American-bred. During the whole season they managed to keep at bay young hopefuls like Willy T. Ribbs, the '83 Transam Rookie, and Darin Brassfield, age 22, elected *"Best '82 Beginner"*. Willy T. Ribbs is 29 years old and, something rare in motor racing, black. He began F Ford racing in England and went on to try his luck with F Atlantic before getting behind the wheel of a Transam in 1982. Last year, his first complete Transam season, he finished second behind David Hobbs. He didn't do as well as expected this year at the early races, he was even absent from the first three. Once he got into the Mercury Capri, however, he notched up four victories. But, it was too late, Gloy had already ensured himself a comfortable points lead and was out of touch.

SUPER VEE – LUYENDYK'S QUEST

In 1978, Arie Luyendyk drove with a Dutch F3 team alongside Jan Lammers and Huub Rothergatter. Arie had deserted the Super Vee camp and would never have believed possible that just a few years later he would be racing in the States! Arie had no qualms about forsaking F2 and F3 and going back to *"GO"*, believing in the principle that sometimes it is better to step back a pace or two to make a larger leap forward. He was not wrong. Two years ago, he emigrated to the States and, at the age of thirty one, dominated the 1984 Super Vee, SCCA-Robert Bosch Championship. At the opening round, Canada's Heimrath Junior was the first to cross the finish line of the Long Beach circuit, but Luyendyk and the American Chip Robinson, a 29-year old Jim Russell graduate, soon made their presence felt, as main contenders for the title.
Luyendyk won the championship convincingly as it turned out. In fact, his win was so convincing that he was offered a drive at the Elkart Lake CART round, at the wheel of a Provimi team March 84C, and he will be the 1985 Provimi driver for the same championship. Luyendyk, or patience rewarded...

CANAM – ROE FINDS HIS SLOT

Young talented driver, Michael Roe, made a name for himself by winning the 1978 Formula Ford Festival at Brands Hatch. However, the 24-year old Irishman wasn't as lucky thereafter, as he had hoped he was going to be. After two seasons in F3, he seized the opportunity to drive in the States. The CANAM challenge suited him better, despite its lacklustre appeal.
Canadian driver, Jacques Villeneuve, won the 83 championship, comprising six rounds, when he beat England's Jim Crawford (a former F2 and F3 competitor), now emmigrated to the States. That was just the time Michael Roe made his appearance on the scene and he did not go unnoticed — far from it. He was given a drive in the VDS-004, powered by a Chevy V8, and won the first four rounds. His most dangerous rival, Jim Crawford (March 847-Chevy V8), was forever at his tail, and it came as no surprise that when Roe had to retire on two occasions, victory automatically went to Crawford. Thoroughly stimulated by this godsend, Crawford took his race to the crown that much more seriously. However, the Irishman wasn't to be outdone and straightened out the record by winning the championship.
The star duo didn't have much difficulty in outdistancing the rest of the disparate field, led by the Canadian, Horst Kroll (Frisbee-Chevy V8). Old timer, Walter Lechner, from Austria, would undoubtedly have had his say in the William 007-Chevy, if it hadn't been wrecked in an accident, forcing him to finish the season in a March 821. The most evenly-matched class, was surely the Two-Litre category, with Kim Campbell (March 832 BMW) winning ahead of Rod Cusumano (March 822 BMW).

Although Roe crossed the finish line seven times in first position and Jim Crawford three, Roe only just managed to pip him to the title.

TRANSAM/SSCA CHALLENGE

1. **TOM GLOY** (Mercury Capri), **225 points**; 2. Gregg Pickett (Mercury Capri), 189 points; 3. Willy T. Ribbs (Mercury Transam), 155 points; 4. Wally Dallenbach Jr (Chevrolet Camaro), 142 points; 5. Bob Lobenberg (Pontiac Transam), 138 points; 6. Darin Brassfield (Chevrolet Corvette), 120 points; 7. Jim Miller (Pontiac Transam), 110 points; 8. David Hobbs (Chevrolet Corvette), 106 points; 9. Paul Miller (Porsche 924), 76 points; 10. Jim Derhaag (Pontiac Transam), 59 points; etc.
— 1984 Winners: **Greg Pickett** (Sears Point, Portland, Seattle, Sears Point), **Willy T. Ribbs**, (Daytona, Brainerd, Watkins Glen, Green Valley).
— Three victories: **Tom Gloy** (Detroit, Trois Rivières, Las Vegas).
— Two victories: **Darin Brassfield** (Road Atlanta, Riverside).
— One victory: **Bob Lobenberg** (Summit Point), **Paul Miller** (Mosport), **Richard Spenard** (Road America).

CANAM/SCCA CHALLENGE

1. **MICHAEL ROE** (IRL), VDS 004 Chevy, **162 points**; 2. Jim Crawford (GB), March 847 Chevy V8), 156 points; 3. Horst Kroll (CDN), (Frisbee KR/3 Chevy V8), 119 points; 4. Kim Campbell (USA), (March 832 BMW 2l), 88 points; 5. Rod Cusumano (USA), (March 822 BMW 2l), 55 points; 6. Charles Mank (USA), (Lola T333 Chevy V8), 54 points; 7. Armando Trentini (USA), (Osella PA9-B BMW 2l), 52 points; 8. Walter Lechner (A), (March 821 Chevy V8), 37 points; 9. Ran Canizares (USA) (Phoenix GTP 84 Chevy V8) 30 points...
2 litre results: 1. K. Campbell, 15T points; 2. R. Cusumano 120 points; 3. A. Trentini, 95 points; 4. R. Canizares, 76 points; 5. Jeremy Hill (CDN) (Photon JH-2 Hart), 56 points...
1984 winners:
Seven victories: **Michael Roe** (Dallas, Mosport, Brainerd, Lime Rock, Mosport, Sears Point, Riverside).
Three victories: **Jim Crawford** (Road Atlanta, Trois Rivières, Texas Chal).

VW SUPER VEE/SCCA CHALLENGE

1. **ARIE LUYENDYK** (NL), **172 points**; 2. Chip Robinson (USA), 150 points; 3. Jeff McPherson (USA), 116 points; 4. Ludwig Heimrath Jr (CDN), 111 points; 5. Roger Penske Jr (USA), 104 points; 6. Peter Moodie (USA), 86 points; 7. Mike Hooper (USA), 76 points; 8. Ted Prappas (USA), 66 points; 9. Dominic Dobson (USA), 59 points; 10. John Richards (USA), 52 points.
— (all on Ralt RT5s).
— 1984 Winners:
— Four victories: **Arie Luyendyk** (Milwaukee, Cleveland, Watkins Glen, Trois Rivières).
— Three victories: **Chip Robinson** (Long Beach, Meadowlands, Road America), **Ludwig Heimrath Jr** (Phoenix, Portland, Las Vegas).
— One Victory: **Jeff McPherson** (Michigan), **Ted Prappas** (Laguna Seca).

FORMULA ATLANTIC

1. **DAN MARVIN** (Ralt RT4 Cosworth 1600), **116 points**; 2. Chris Bender (Ralt RT4 Cosworth), 112 points; 3. John Della Pena (Ralt RT4 Cosworth), 74 points.

IMSA – RANDY LANIER – SURPRISE OF THE YEAR

The American public consider a win at the Le Mans 24 Hours as something magic and the French race is as prestigious as ever. When you think that Randy Lanier won the IMSA challenge ahead of three former Le Mans winners — Bill Whittington, Derek Bell and Al Hobert, you realise how much of an impact the Californian driver made.

30-year old Lanier had his best season ever this year. A regular competitor at IMSA races, he was seen in Europe three years ago, when he paired up with Denis Morin in a Ferrari 512 BB. Just two years ago, he was having a hard time being a worthy team mate to Bob Wollek at the Daytona 24 Hours. In other words, Lanier was just another of the better IMSA drivers.

Then suddenly, everything clicked into place, starting with Sebring, and thereafter, he put in a string of excellent results, finishing either first or second in the Blue Thunder Racing March 84G/Chevrolet, with Bill Whittington as his team mate. The difference between the two drivers was revealed at *"solo"* races when Lanier showed he was clearly the faster of the two.

The IMSA GTP challenge is immensely popular with the American public and it's a shame that world Endurance racing over here doesn't enjoy the same kind of enthusiasm. Constructors competing in the IMSA challenge include, March, Jaguar, Porsche, Ford, Lola, Argo, Momo, Mazda and Alba. An ingenious equivalence system has been devised so that the cars are on more of an equal footing, giving exciting races that are very rarely boring.

The Lola T600s, the Marches and the Porsche 935s were the main protagonists until the advent of the Porsche 962, the excellent road handling Jaguar XJR-5s and the presence of the colossal March 84G/Chevrolets and 83G/Porsches. In 1984, Chevrolet chalked up another victory — the first since Brian Redman's win in 1981 (Lola T600/Chevy).

Many were expecting the Porsche 962s to do better than they did, especially after the superb demonstration given by the Andretti father and son team at the Daytona 24 Hours. However, the infrastructure of the Porsche team took a long time to get right and there were problems with the delivery of parts. It wasn't until the 9th round, that it was first driven to victory by Al Holbert (the title holder) and Derek Bell on the Mid Ohio circuit but Lanier/B. Whittington had scored enough points to not feel any threat from Holbert/Bell's 962 in their quest for the title. The end of season results were well balanced with five victories going to Holbert/Bell against four to the March Blue Thunder team.

South Africa's Sarel Van der Merwe was another meritorious championship fighter — his March 83G featured a Porsche engine block. Despite winning at the Daytona 24 Hours, Van der Merwe wasn't able to keep up with the leaders as his *"Kreeply Krauly"* March was destroyed by fire on more than one occasion. He was also handicapped in that his team mate, Bob Martin, wasn't really an ideal choice for an evenly-matched pair.

Redman/Bundy won the Miami round in the *"Group 44"* Jaguar XJR-5, but they were unable to repeat their 1983 performance of four wins. The Le Mans 24 Hours was uppermost in Bob Tullius' mind which perhaps explains why the Jags were relatively overshadowed, though Doc Bundy was unlucky to run out of fuel with only a couple of hundred yards to go to the chequered flag, whilst leading at Sears Pont. The Mustang Zakspeed GTP didn't live up to the promises of its performances at the closing rounds to the 83 season. Klaus Ludwig, Bob Wollek and Tom Gloy all had their fair share of problems, including going off a number of times after suspension failure.

More and more competitors have joined the IMSA ranks over the years. However there are enormous differences concerning the driving skills and the levels of preparation between the first and last cars on the starting grids. Professionals and amateurs race together, and one of the delights of IMSA is to be able to admire a spanking new Porsche 962 and an antediluvian *"modified"* Porsche 914-6 at the start of the same race!

IMSA races, however, can often ressemble a rodeo. European drivers who complain about the backmarkers at the Le Mans 24 Hours, should think twice before entering an IMSA race at circuits like Laguna Seca or Mid Ohio, where the organisers hold no qualms about unleashing between 45 and 50 cars on short circuits for races that are to last three, five, or even six hours! ■

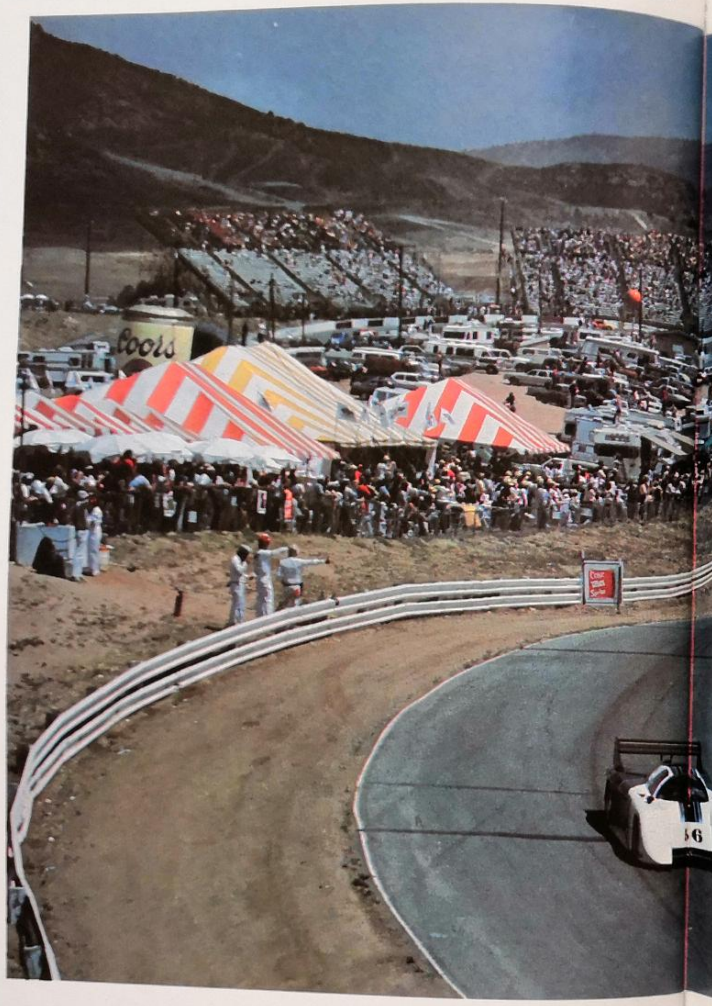
IMSA GTP

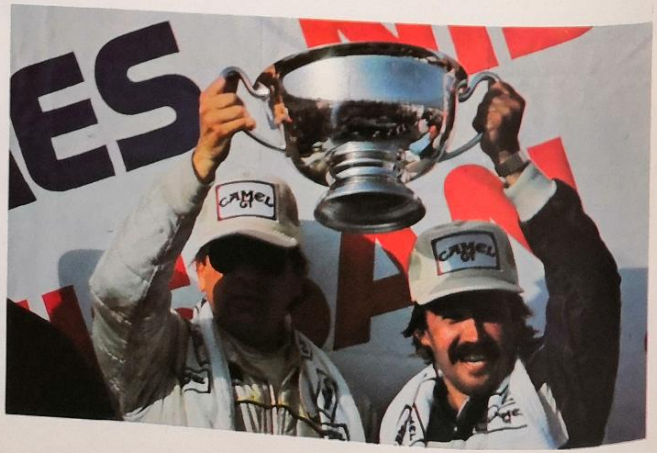
1. RANDY LANIER (USA) (March 84G Chevy), 189 points ; 2. Bill Whittington (USA) (March 84G Chevy), 168 points ; 3. Derek Bell (GB) (Porsche 962), 136 points ; 5. Sarel Van der Merwe (ZA) (March 83G Porsche + Porsche 962), 105 points ; 6. Brian Redman (GB) (Jaguar XJR-5), 97 points ; 7. Doc Bundy (USA) (Jaguar XJR-5), 94 points ; 8. Bob Tullius (USA) (Jaguar XJR-5), 74 points ; 9. Kenper Miller (USA) (March 83G Chevy), 70 points ; 10. Hurley Haywood (USA) (Porsche 962/Jaguar XJR-5), 68 points.

IMSA GTO 1. Roger Mandeville (Mazda RX7) 200 points ; 2. Gene Felton (Chevy Camaro), 163 points ; 3. Amos Johnson (Mazda RX7), 152 points.

IMSA GTU : Jack Baldwin, 225 points ; 2. Jack Dunham, 154 points ; 3. Jeff Kline, 129 points... Tous sur Mazda RX7.

IMSA CHALLENGE : 1. Tommy Archer (Renault Alliance), 240 points ; 2. Bobby Archer (Renault Encore), 193 points ; 3. Dennis Shaw (Mazda GLC), 142 points.





A typical if not symbolical aspect of the IMSA GTP challenge — a March 84G/Chevy leads a Porsche 962.

Bill Whittington and Randy Lanier (moustachless since) richly deserved their success.

1984 IMSA GTP

ROUNDS	1	2	3	4	5
DAYTONA	V. der MERWE-MARTIN-OLIVEY (March 83 G Porsche) REDMAN-BUNDY (Jaguar XJR-5) De MARIAEZ-HEYER-JOHANSSON (Porsche 935) D. WHITTINGTON (March 84 G Chevy) B. WHITTINGTON-LANIER (March 84 G Chevy) LANIER (March 84 G Chevy) LANIER-B. WHITTINGTON (March 84 G Chevy) VAN DER MERWE (March 83 G Porsche) HOLBERT-BELL (Porsche 962) HOLBERT-BELL-ADAMS (Porsche 962) LANIER-B. WHITTINGTON (March 84 G Chevy) B. WHITTINGTON (March 84 G Chevy) HOLBERT-BELL (Porsche 962) HOLBERT-BELL (Porsche 962) LANIER-B. WHITTINGTON (March 84 G Chevy) D. WHITTINGTON (March 84 G Chevy) HOLBERT-BELL (Porsche 962)	FOYT-WOLLEK-BELL (Porsche 935) TULLIUS-BEDARD (Jaguar XJR-5) LANIER-B. WHITTINGTON-HINZE (March 83 G Chevy B. WHITTINGTON (March 84 G Chevy) HOLBERT-BELL (Porsche 962) MILLER (March 84 G Chevy) /ULLIUS-BUNDY (Jaguar XJR-5) LANIER (March 84 G Chevy) LANIER-B. WHITTINGTON (March 84 G Chevy) LEVEN-J. PAUL Jr (Porsche 962) TULLIUS-BUNDY (Jaguar XJR-5) BUNDY (Jaguar XJR-5) LEVEN-HOBBS (Porsche 962) TULLIUS-BUNDY (Jaguar XJR-5)/March 83 G Chevy) COWART-MILLER (March 82 G Chevy) KALAGIAN-LLOYD (March 84 G Chevy)	TULLIUS-HOBBS-BUNDY (Jaguar XJR-5) MORTON-LOBENBERG (Lola T88-Chevy) FOYT-WOLLEK-BELL (Porsche 935) REDMAN-BEDARD (Jaguar XJR-5) MILLER-De NARAEZ (March 84 G Chevy) VAN DER MERWE (March 83 G Porsche) REDMAN-BEDARD (Jaguar XJR-5) HOLBERT (Porsche 962) HAYWOOD-RAHAL (Porsche 962) REDMAN-HAYWOOD (Jaguar XJR-5) HOLBERT-BELL (Porsche 962) REDMAN (Jaguar XJR-5) LANIER-B.WHITTINGTON (March 84 G Chevy) Don and Dale WHITTINGTON (March 83 G Porsche) LEVEN-ADAMS (Porsche 962) St.JAMES-HOLMES (Argo JM16 Cosworth) WOLLEK-HOLBERT (Porsche 962)	LEVEN-HAYWOOD-HOLBERT-BALLOT (Porsche 935) FOYT-WOLLEK (Porsche 935) BAKER-MULLEN-BLACKALLEN (Porsche 935) COWART-MILLER (March 84 G Chevy) MORTON-ADAMOWICZ (Lola T 500 Chevy) GUNN (Pogea Chevy) MORTON-ADAMOWICZ (March 84 G Chevy) MORETTI (Momo ARS Ford V8) MORTON-SPENARD (March 84 G Chevy) DOWNING-MAFFUCCI (Argo JM 16-Mazda) LEVEN-ADAMS (Porsche 962) VAN DER MERWE (Porsche 962) VAN DER MERWE / SCHECKTER (March 83 G Porsche) VAN DER MERWE-MARTIN (March 84 G Chevy) KALAGIAN-LLOYD (March 84 G Chevy) MORGAN-GANTZ (Argo JM 16 Buick V6) HOBBS-LEVEN (Porsche 962)	BAKER-MULLEN-BLACKALLEN (Porsche 935) HALSMER-HAYUE (Lola T616 Mazda) AKIN-GYTENE-STACK (Porsche 935) Art and Al LEON-HAYWOOD (March 84 G Chevy) KENDALL-GUNN (Lola T 600 Chevy) MORTON (Lola T 600 Chevy) FELTON-HAGAN (Chevrolet Camaro) GANZ (Argo JM16 Buick V6) VAN DER MERWE-MARTIN (March 83 G Porsche) BUSBY-KNOPP (Lola T 616 Mazda) MORETTI-KASE (Momo ARS Ford V8) LUDWIG (Ford Mustang T.) REDMAN-HAYWOOD (Jaguar XJR-5) LANIER-B. WHITTINGTON VINCENTZ-MULLEN (Porsche 934) DOWNING-MAFFUCCI (Argo JM 16 Mazda) LUDWIG-GLOY (Ford Mustang T.)
MIAMI					
SEBRING					
ROAD ATLANTA					
RIVERSIDE					
LAGUNA SECA					
CHARLOTTE					
LINE ROCK					
MID OHIO					
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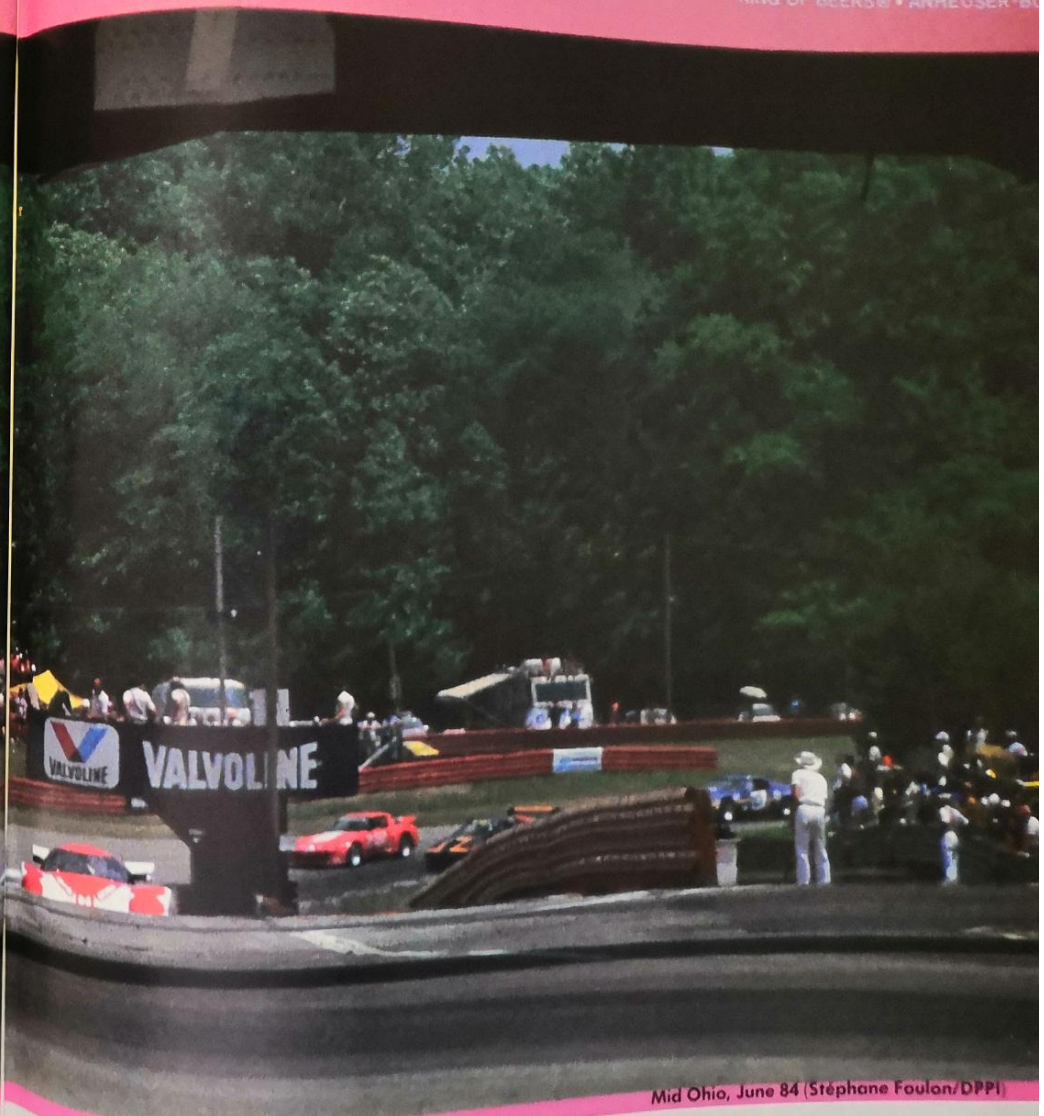

Mid Ohio, June 84 (Stéphane Foulon/DPPI)

ALL THE MARCHES ROARED OFF AHEAD, BUT IT WAS THE HOLBERT/BELL PORSCHE 962 THAT CROSSED THE FINISH LINE FIRST

Laguna Seca, August 84 (Stéphane Foulon/DPPI)

THE "FILLERS IN" FOR THE CART CHAMPIONSHIP HERE MIKE THACKWELL (No. 6) LEADS HOLMES AND PIMM

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USA NEWS PLEASE !

Dear GPI,
Grand Prix International used to cover motor racing in the States. Unfortunately it appears that the new format does not cater for American racing fans and no information whatsoever has been published. I hope that you will include CART, NASCAR and IMSA articles during 1985.
Robert Lortie
Montreal
Canada

Dear Robert,
As you will have noticed, this issue of GPI includes a retrospective of the 1984 American racing season which apparently many of our readers enjoy. We will be giving regular information throughout the 1985 season.
Happy reading,
GPI.

DATES PLEASE !

Dear GPI,
Could you please tell me when the first editions of the Monte Carlo Rally and of the Monaco GP were held ?
Thank you,
W. van Cauwenberg,
Brussels,
Belgium

Dear William,
Thank you for your letter.
The 1985 edition of the Monte Carlo Rally will be the 53rd one, the first was held in 1911. The first GP to be raced through the streets of the pricipality took place in 1929.
Yours sincerely,
GPI.

WHY MONACO ?

Dear GPI,
I think that this whole FISA/AC Monaco bickering is absolutely scandalous and not worthy of motor racing. As per usual in this kind of situation, the spectators were never once consulted, and we're the ones who suffer in what has turned out to be a question of politics rather than sport.
Do you think that the debates concerning the Rally and the GP will be settled favourably and soon ?
Brian Smith,
Colville Road,
London W3

Dear Brian,
We agree entirely with what you say. However, the very day you posted your letter, President Boeri of the AC Monaco, was given the go-ahead to start organising the Rally... with only a month to go to the start ! Let's hope that the GP will be settled likewise, and rapidly !
Yours faithfully,
GPI.

MISTAKE !

Dear GPI,
I'm sure I was not the only reader to spot a very obvious mistake in your last issue (GPI No 88) on page 19. You devote a whole page to Elio de Angelis for the drivers' podium and the photo at the top was not of him, but of his team mate, Nigel Mansell !
You ought to be ashamed of yourselves !

Martin Elford
75, Myrdlie Street,
London E1

Dear Martin,
Thank you for writing in.
Mea Culpa ! We were in such a rush to meet our deadline as our production difficulties still hadn't been sorted out, that while we were putting the best of our Lotus slides aside, one of Nigel Mansell somehow slipped in. The fault is entirely ours, and hope you'll forgive us.
Yours, GPI.

This column belongs to Grand Prix International readers.

Dear Readers,
These two columns are yours to vent your views and make your suggestions. Please write to : Production Editor, Grand Prix International, Post Bag, 7, rue de Lille, 75007 Paris (France).

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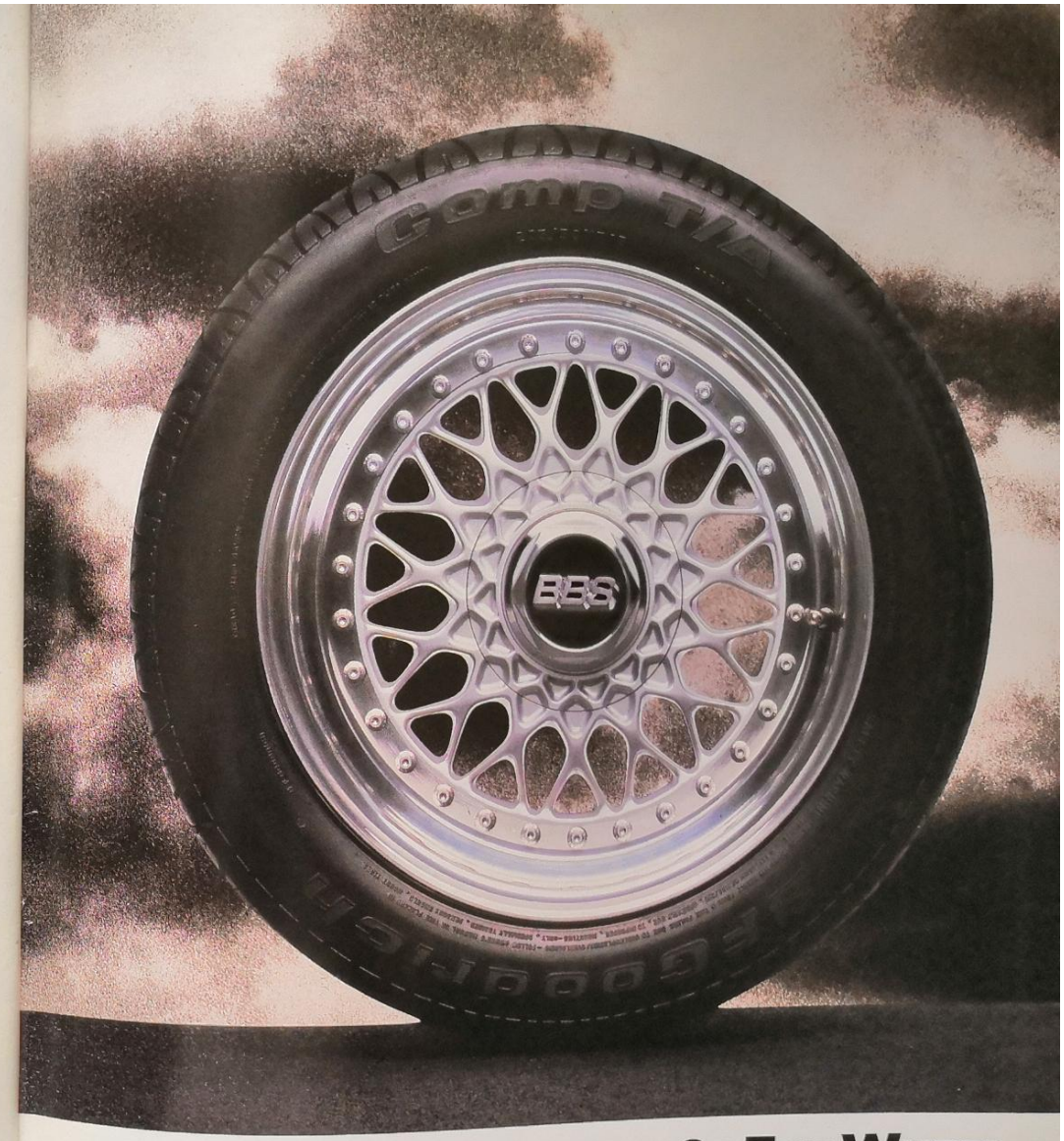

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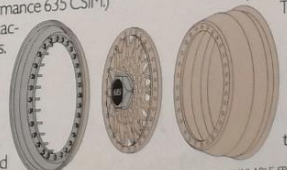

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